Summary of British Columbia Herring Sampling Data for the 1986-87 Season

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December 1987

Canadian Data Report of Fisheries and Aquatic Sciences No. 679

88-04531/

Canadian Data Report of Fisheries and Aquatic Sciences

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Le titre exact paraît au haut du résumé de chaque rapport.

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by

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Cat. No. Fs 97-13/0679E ISSN 0706-6465

Rosenfeld, L. and V. Haist. 1987. Summary of British Columbia herring sampling data for the 1986-87 season. Can. Data Rep. Fish. Aquat. Sci. 679: 113 p.

ABSTRACT

Rosenfeld, L. and V. Haist. 1987. Summary of British Columbia herring sampling data for the 1986-87 season. Can. Data Rep. Fish. Aquat. Sci. 679: 113 p.

Age compositions and the average length and weight at age, the sex ratio, and the maturity stages of herring samples combined by geographical area, time period, gear type, and source are tabulated for the 1986-87 season. Tables are given for two geographical groupings: statistical areas and sections.

Key works: Clupea harengus pallasi

RÉSUMÉ

Rosenfeld, L. and V. Haist. 1987. Summary of British Columbia herring sampling data for the 1986-87 season. Can. Data Rep. Fish. Aquat. Sci. 679: 113 p.

On présente, sous forme de tableaux, les compositions selon l'âge, la longueur et le poids moyens selon l'âge, la proportion relative des sexes et les stades de maturité du hareng en fonction d'échantillons regroupés selon la région géographique, la période, le type d'engin et la source pour la saison de pêche de 1986-1987. Des tableaux sont aussi présentés pour deux entités géographiques soit les districts et les secteurs statistiques.

Mots-clés: Clupea harengus pallasi

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INTRODUCTION

Biological samples of herring are collected and sampled annually for length, weight, sex, maturity, age, and gonad weight. This information is used in stock assessments, and for determining stock characteristics. As well, it is useful to fishery managers in the field. This report summarizes biological characteristics by geographical groupings, time periods, gear, and source types.

Individual fish records since the 1950-51 season are maintained on computer files. These files provide a 37-year series of data accessible for analyses and modelling.

METHODS

The catch sampling program collects samples from a variety of sources. Pre-fishery charters are used to sample all major stocks. Roe fisheries are sampled with the goal of obtaining ten samples from each seine fishery, and six samples from each gillnet fishery. A sampling plan is designed for each fishery to ensure that the sample series collected represents the catch in terms of time and space. Research samples are acquired from varying sources. All biological samples are frozen on board vessels or at district offices and shipped to the Pacific Biological Station where they are processed following standard procedures described by Hourston and Miller (1980).

Pre-fishery charters provide the majority of samples. Twelve charter vessels assessed all major stocks for the 1987 herring roe fisheries using echo sounding and catch sampling (Armstrong 1987). Charter timing was set to ensure that the vessels were available before and during major spawnings in each area. DFO (Department of Fisheries and Oceans) staff on board the charter vessels collected samples from the test fisheries.

Commercial samples were obtained from two types of fisheries in the 1986-87 season. The food and bait herring fisheries took place in the Prince Rupert District and Strait of Georgia regions during November and December, 1986. The 1987 roe herring fisheries occurred in the Queen Charlotte Islands, Prince Rupert District, Central Coast, Strait of Georgia, and West Coast of Vancouver Island regions (Figs. 1-6), between March 9 and April 2. Roe fishery samples were collected from landings made to processors at Prince Rupert, Vancouver, and Ucluelet, according to fishery-specific sampling plans.

Research samples in the 1986-87 season were collected from three sources. The La Pérouse project conducted a research cruise (August 12-25, 1986), to study offshore herring biology, using the F/V CALEDONIAN. As well,

the W. E. RICKER obtained herring research samples while on two groundfish cruises, (February 14-25 and March 14-23, 1987). Other research samples were obtained from the DFO seiner WALKER ROCK, which conducts annual fall and winter hydroacoustic surveys in the lower Strait of Georgia.

DATA COMPILATION AND SCREENING

The recorded data are entered onto computer tapes. The data are screened by computer for relationships between age, length, and weight which are outside the normal range for the coast as a whole (mean ± 2 standard deviations). Anomalies are listed and the associated data checked for possible errors in recording or coding.

RESULTS

Three hundred and eighty-six biological samples were processed in the 1986-87 season. Pre-fishery charter vessels supplied 235 samples. Representative food and bait herring samples were obtained only from the Strait of Georgia region, which provided 11 samples. A total of 121 samples were collected from 17 roe herring fisheries in 1987. The relatively restricted fishing times and boundaries of the roe fisheries made it easier to collect representative sample series (Thomas, J. O. and Associates, 1987). The W. E. RICKER supplied three research samples, and the F/V CALEDONIAN obtained four samples. Seven research samples were acquired by the WALKER ROCK.

The following types of information, with associated table numbers, are summarized in this report:

Charter vessel information	Table 1
Roe herring fishery summaries	Table 2
Sample summaries	Table 3
Codes for sample data	Table 4
Week numbers for sample data	Table 5
Maturity stages for Pacific herring	Table 6
Data summaries	Tables 7-13

The data summaries include various groupings of samples by geographical areas, time periods, gear and source types. Each summary contains information on the age composition, the average length and weight at age, the sex ratio, and the maturity stages of the combined samples in that report. Female roe maturity is defined as:

Immature - Hjort stages 1-4 (Table 6)
Mature - Hjort stages 5-6 (Table 6)
Spent - Hjort stages 7-8 (Table 6)

Fish classified as immature in estimating the sex ratio are those whose gonads are not sufficiently developed for determining their sex.

Location codes are documented in Haist and Rosenfeld (1988).

ACKNOWLEDGMENTS

We thank Margaret Burke and Kathy Rutherford of the Fish Aging Unit for determining fish ages. Unicore Services Ltd. collected the samples and Archipeligo Ltd. processed them.

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Thomas, J. O. and Associates. 1987. 1987 Sample collection of herring catch sampling program. DFO Contract #10SB.FP597-6-0891: 35 p.

Table 1. 1987 roe herring charter vessels by region and duration, and biological samples by charter vessel.

Region	Vessel	Duration	No. of samples processed
Queen Charlotte Islands	ROYAL VIKING	Mar. 14 - Apr. 08	12
	KARENORA II	Mar. 08 - Apr. 02	19
Prince Rupert District	SEABOUND	Mar. 20 - Apr. 01	17
	SEMIDI	Mar. 16 - Apr. 10	22
Central Coast	FISHER LASSIE II	Mar. 02 - Apr. 01	22
	KYNOC	Mar. 10 - Apr. 09	25
Strait of Georgia/ Johnstone Strait	ARGENT FISHER	Feb. 23 - Mar. 20	19
	FRANCISCAN NO. I	Feb. 23 - Mar. 20	16
	SEABOUND	Feb. 27 - Mar. 15	16
	WESTVIEW NO. I	Feb. 23 - Mar. 20	25
West Coast Vancouver Island	C. VENTURE NO. 1	Feb. 23 - Mar. 20	22
	ELLING K	Feb. 23 - Mar. 20	11
	VAMPY 1	Feb. 27 - Apr. 02	9
Total			235

Table 2. Summary of 1987 roe herring fisheries.

Region	Gear	Management areas	Date	Time	Hailed catch (tonnes)
Queen Charlotte Islands	SN	2-13	20/03/87	1032-1421	1870
Prince Rupert District	GN	4-5,7,8,14	24/03/87	0800-1600	4054[a]
	GN	4-5,7,8,14	25/03/87	0730-1330	
	GN	3-4,4-5,6,7,8,14	29/03/87	1000-1800	
	GN	4-9	02/04/87	1000-1330	
	SN	5-4	31/03/87	1100-1908	1921[b]
	SN	5-4	01/04/87	1003-1009	
	SN	5-4	01/04/87	1300-1309	
Central Coast	GN	6-18,7-9,18	30/03/87	0900-1800	888
	SN	7-12,13	25/03/87	1216-1740	2425
Strait of Georgia	GN	14-7,9,10	09/03/87	1030-1800	1474
	GN	14-4,5,7,9,10	17/03/87	0800-1700	272
	GN	17-4,5,16	17/03/87	0800-1700	1491
	GN	14-4,5,7,9,10	18/03/87	0800-1300	446
	GN	17-4,5,6,7,16	18/03/87	0800-1300	2340
	SN	15-2	14/03/87	1402-2000	1996
	SN	15-2	15/03/87	0800-1115	1089
West Coast Vancouver Island	GN	25-13	12/03/87	0800-1815	2549
	SN	23-9,10	12/03/87	1201-1456	13738

[a]Total for all Prince Rupert District gillnet openings.

[b]Total for all Prince Rupert District seine openings.

Table 3. 1986-1987 sample information by section and gear.

Section	Gear	Month	Day	Location	Source	Preservative	Sample number	Number of fish sampled	Number of fish aged
002	29	3	13	1669	5	0	361	100	100
003	29	3	14	91	5	0	345	100	100
	29	3	15	97	5	0	356	100	97
	29	3	27	91	5	0	292	100	97
005	29	3	16	80	5	0	360	100	99
021	29	3	8	1744	5	0	172	98	93
	29	3	10	165	5	0	167	98	90
	29	3	11	1592	5	0	157	100	95
	29	3	12	165	5	0	168	98	92
	29	3	15	1744	5	0	158	100	95
	29	3	16	1583	5	0	164	100	93
	29	3	17	143	5	0	163	100	90
	29	3	18	1583	5	0	171	100	99
	29	3	18	165	5	0	314	100	94
	29	3	19	1744	5	0	165	100	96
	29	3	19	145	5	0	344	100	97
	29	3	19	145	5	0	350	94	90
	29	3	20	166	0	0	245	100	81
	29	3	20	166	0	0	253	100	98
	29	3	20	166	0	0	258	100	97
	29	3	20	171	0	0	264	100	90
	29	3	20	166	0	0	265	100	96
	29	3	20	166	0	0	266	100	81
	29	3	20	166	0	0	271	100	95
	29	3	20	166	0	0	272	100	92
	29	3	20	171	0	0	284	100	87
	29	3	20	171	0	0	304	100	93
	29	3	20	145	5	0	306	100	95
	29	3	20	1425	5	0	343	97	91
	29	3	20	145	5	0	354	100	95
	29	3	22	166	5	0	159	82	78
	29	3	22	145	5	0	359	86	70
	29	3	22	145	5	0	367	94	75
	29	3	23	1592	5	0	156	100	98
	29	3	30	1583	5	0	177	100	91
	29	3	31	143	5	0	166	100	97
	29	4	1	143	5	0	155	94	92
023	29	3	28	160	5	0	161	100	89
	29	3	29	161	5	0	154	100	96
024	29	3	27	1739	5	0	162	90	85
025	29	3	26	1606	5	0	160	100	95
033	19	3	29	213	0	0	281	100	87
	29	3	16	218	5	0	229	100	100
	29	3	16	218	5	0	322	100	99
	29	3	20	211	5	0	286	100	95
	29	3	21	1488	5	0	277	100	98
	29	3	30	213	5	0	279	100	92

Table 3 (cont'd)

Section	Gear	Month	Day	Location	Source	Preservative	Sample number	Number of fish sampled	Number of fish aged
042	19	3	23	260	4	0	336	100	94
	19	3	24	260	0	0	239	100	84
	19	3	24	260	0	0	251	100	96
	19	3	24	263	0	0	255	100	92
	19	3	24	263	0	0	257	100	79
	19	3	24	260	0	0	259	100	92
	19	3	25	260	0	0	256	100	71
	19	3	25	263	0	0	267	100	94
	19	3	25	260	0	0	268	100	92
	19	3	25	260	0	0	305	100	83
	19	3	29	260	0	0	240	100	96
	19	3	29	260	0	0	246	100	79
	19	3	29	260	0	0	263	100	77
	19	3	29	260	0	0	274	100	92
	19	3	29	260	0	0	294	100	88
	19	4	2	1443	0	0	303	100	99
	29	3	20	262	5	0	230	100	99
	29	3	20	266	5	0	280	100	97
	29	3	21	260	5	0	287	100	99
	29	3	22	260	5	0	223	100	96
	29	3	22	266	5	0	341	100	99
	29	3	23	260	5	0	226	100	98
	29	3	23	266	5	0	291	100	98
	29	3	25	266	5	0	313	100	99
	29	3	30	1380	5	0	225	100	98
	29	3	30	239	5	0	298	100	95
	29	3	31	266	5	0	231	100	94
043	1	4	1	287	4	0	297	100	95
	19	4	2	292	0	0	238	100	86
	19	4	2	292	0	0	250	100	93
	19	4	2	1746	0	0	260	100	91
	19	4	2	292	0	0	269	100	90
	29	3	28	287	5	0	288	100	100
	29	3	29	291	5	0	237	100	98
	29	4	2	287	4	0	358	100	97
052	29	3	18	342	5	0	308	100	99
	29	3	19	1779	5	0	233	100	96
	29	3	19	1476	5	0	319	100	98
	29	3	21	349	5	0	224	100	94
	29	3	21	356	5	0	234	100	94
	29	3	22	352	5	0	228	100	97
	29	3	25	358	5	0	227	100	91
	29	3	25	350	5	0	302	99	93
	29	3	26	341	5	0	222	100	93
	29	3	27	355	5	0	285	100	98
	29	3	27	341	5	0	309	100	96
	29	3	27	344	5	0	316	100	100
	29	3	28	297	5	0	282	100	97

Table 3 (cont'd)

Section	Gear	Month	Day	Location	Source	Preservative	Sample number	Number of fish sampled	Number of fish aged
052	29	3	29	1416	5	0	235	100	97
	29	3	29	358	5	0	307	100	96
	29	3	30	344	5	0	236	100	94
	29	3	30	341	5	0	364	100	97
	29	3	31	1476	0	0	170	100	89
	29	3	31	354	0	0	173	100	88
	29	3	31	341	0	0	185	100	96
	29	3	31	344	5	0	232	100	98
	29	3	31	341	0	0	310	100	90
	29	3	31	341	0	0	311	100	97
	29	4	1	341	0	0	169	100	79
	29	4	1	341	0	0	175	100	80
	29	4	1	341	0	0	178	100	80
	29	4	1	341	0	0	249	100	95
	29	4	1	341	0	0	254	100	80
	29	4	1	341	0	0	276	100	89
	29	4	2	1416	5	0	299	100	96
	29	4	3	1416	5	0	324	100	96
	29	4	3	350	5	0	329	100	94
067	19	3	30	426	0	0	242	100	84
	19	3	30	426	0	0	261	100	89
	19	3	30	426	0	0	273	100	79
	19	3	30	426	0	0	275	100	89
	29	3	10	426	5	0	193	100	94
	29	3	11	426	5	0	204	100	98
	29	3	14	426	5	0	195	100	95
	29	3	19	426	5	0	199	100	94
	29	3	23	426	5	0	213	100	96
	29	3	24	425	5	0	189	100	94
	29	3	28	426	5	0	215	100	97
	29	3	29	428	5	0	209	100	96
072	19	3	30	480	0	0	174	100	75
	19	3	30	480	0	0	180	100	89
	19	3	30	480	0	0	186	100	77
	19	3	30	480	0	0	278	100	91
	29	3	8	496	5	0	221	100	97
	29	3	13	471	5	0	211	100	98
	29	3	16	480	5	0	206	100	90
	29	3	20	457	5	0	342	100	99
	29	3	22	457	5	0	197	100	96
	29	3	23	457	5	0	332	77	67
	29	3	25	481	0	0	182	100	90
	29	3	26	457	5	0	335	100	96
	29	3	27	481	5	0	220	86	81
	29	3	27	457	5	0	295	100	98
	29	3	27	457	5	0	339	100	93

Table 3 (cont'd)

Section	Gear	Month	Day	Location	Source	Preservative	Sample number	Number of fish sampled	Number of fish aged
074	19	3	30	542	0	0	179	100	86
	19	3	30	542	0	0	183	100	79
	19	3	30	542	0	0	187	100	71
	19	3	30	542	0	0	365	79	72
	29	3	2	482	5	0	219	100	98
	29	3	6	539	5	0	217	100	93
	29	3	7	482	5	0	210	100	89
	29	3	7	539	5	0	289	100	94
	29	3	12	482	5	0	218	100	94
	29	3	12	539	5	0	330	96	94
	29	3	13	542	5	0	283	100	96
	29	3	16	482	5	0	293	99	96
	29	3	18	542	5	0	196	100	96
	29	3	20	536	5	0	203	100	97
	29	3	24	482	5	0	212	97	93
	29	3	24	483	5	0	321	100	98
	29	3	25	558	0	0	181	100	89
	29	3	25	482	0	0	184	100	86
	29	3	25	558	0	0	188	100	85
	29	3	25	438	0	0	243	96	83
	29	3	25	438	0	0	244	100	92
	29	3	25	438	0	0	247	100	95
	29	3	25	462	0	0	248	100	96
	29	3	25	438	0	0	252	100	89
	29	3	25	438	0	0	290	100	95
	29	3	26	482	5	0	205	100	97
	29	4	2	1429	5	0	216	100	98
075	29	3	17	445	5	0	190	100	98
	29	3	18	505	5	0	208	100	92
076	29	3	5	555	5	0	198	100	98
	29	3	10	549	5	0	191	100	93
	29	3	18	555	5	0	363	100	93
077	29	3	8	1748	5	0	333	100	94
	29	3	13	1748	5	0	296	100	99
	29	3	18	1748	5	0	317	100	97
	29	3	23	1748	5	0	207	100	98
	29	3	27	1748	5	0	201	100	98
078	29	3	25	527	0	0	176	100	76
	29	3	30	530	5	0	202	100	97
085	29	3	4	602	5	0	200	100	96
	29	3	10	602	5	0	214	95	92
	29	3	19	602	5	0	192	100	94
	29	4	3	602	5	0	194	100	96
135	29	3	10	805	5	0	74	100	94
	29	3	11	806	5	0	71	100	93
	29	3	12	808	5	0	73	100	92

Table 3 (cont'd)

Section	Gear	Month	Day	Location	Source	Preservative	Sample number	Number of fish sampled	Number of fish aged
135	29	3	12	805	5	0	315	100	95
	29	3	18	806	5	0	75	100	94
136	29	3	11	1674	5	0	72	100	44
	29	3	12	1674	5	0	320	100	98
142	19	3	9	819	0	0	93	100	81
	19	3	9	819	0	0	97	100	84
	19	3	9	819	0	0	98	100	84
	19	3	9	819	0	0	100	100	79
	19	3	9	819	0	0	107	100	80
	19	3	9	1713	0	0	108	100	82
	19	3	9	819	0	0	109	100	65
	19	3	9	819	0	0	111	100	80
	19	3	17	812	0	0	127	100	82
	19	3	17	812	0	0	141	100	84
	19	3	17	812	0	0	148	100	89
	19	3	17	812	0	0	270	100	69
	19	3	18	837	0	0	129	100	77
	19	3	18	1559	0	0	133	100	79
	19	3	18	837	0	0	241	100	72
	19	3	18	837	0	0	262	100	90
	29	2	23	818	5	0	34	100	92
	29	2	24	818	5	0	11	100	92
	29	2	25	811	5	0	42	100	94
	29	2	26	818	5	0	32	100	91
	29	2	27	1519	5	0	59	100	95
	29	2	28	843	5	0	58	100	92
	29	2	28	818	5	0	327	100	94
	29	3	2	818	5	0	53	100	88
	29	3	3	841	5	0	47	100	91
	29	3	5	811	5	0	50	100	91
	29	3	5	1713	5	0	325	100	94
	29	3	6	839	5	0	7	100	85
	29	3	6	819	5	0	62	100	93
	29	3	7	1680	5	0	19	100	91
	29	3	7	812	5	0	338	100	97
	29	3	7	839	5	0	353	100	98
	29	3	7	838	5	0	355	100	96
	29	3	8	843	5	0	334	100	97
	29	3	13	811	5	0	63	100	90
	29	3	13	811	5	0	318	100	91
	29	3	15	839	5	0	78	100	90
	29	3	16	1519	5	0	64	100	92
143	29	2	28	823	5	0	362	100	91
	29	3	8	823	5	0	49	100	92
	29	3	10	823	5	0	30	100	90
	29	3	18	810	5	0	357	100	90
	29	3	19	810	5	0	348	100	96

Table 3 (cont'd)

Section	Gear	Month	Day	Location	Source	Preservative	Sample number	Number of fish sampled	Number of fish aged
152	29	2	24	909	5	0	31	100	92
	29	2	25	909	5	0	48	100	91
	29	2	27	915	5	0	52	100	94
	29	2	28	910	5	0	39	100	92
	29	3	1	914	5	0	1	100	90
	29	3	1	896	5	0	65	99	94
	29	3	2	910	5	0	3	100	88
	29	3	3	914	5	0	9	100	91
	29	3	4	909	5	0	20	100	91
	29	3	6	904	5	0	4	100	94
	29	3	6	1631	5	0	351	100	100
	29	3	7	1631	5	0	12	100	93
	29	3	8	851	5	0	15	100	91
	29	3	8	904	5	0	352	100	95
	29	3	9	851	5	0	2	100	85
	29	3	13	1631	5	0	77	100	96
	29	3	13	845	5	0	331	100	94
	29	3	14	851	5	0	66	100	92
	29	3	14	856	0	0	92	100	87
	29	3	14	1374	0	0	95	100	91
	29	3	14	1374	0	0	96	100	93
	29	3	14	1374	0	0	101	99	96
	29	3	14	851	0	0	114	100	87
	29	3	14	1772	0	0	123	100	90
	29	3	14	856	0	0	126	100	96
	29	3	14	856	0	0	132	100	89
	29	3	14	861	0	0	144	100	96
	29	3	14	856	0	0	149	100	84
	29	3	14	1772	5	0	340	99	93
	29	3	14	858	5	0	366	100	96
	29	3	15	1772	5	0	76	100	92
	29	3	15	854	0	0	135	100	86
	29	3	15	854	0	0	136	100	88
	29	3	18	856	5	0	346	100	99
172	29	2	25	999	5	0	60	100	84
	29	3	8	922	5	0	33	100	90
	29	3	11	996	5	0	68	100	93
	29	3	13	922	5	0	36	100	89
	29	3	14	1001	5	0	35	100	87
	29	12	3	995	2	0	3	100	91
173	1	4	2	1365	4	0	337	100	94
	19	3	17	941	0	0	125	100	82
	19	3	17	992	0	0	128	100	76
	19	3	17	941	0	0	137	100	74
	19	3	17	1771	0	0	146	100	81
	19	3	17	941	0	0	147	100	82
	19	3	18	987	0	0	130	100	84

Table 3 (cont'd)

Section	Gear	Month	Day	Location	Source	Preservative	Sample number	Number of fish sampled	Number of fish aged
173	19	3	18	953	0	0	139	100	82
	19	3	18	941	0	0	140	100	82
	29	1	15	917	2	0	150	100	91
	29	1	30	917	2	0	151	100	90
	29	1	30	917	2	0	152	100	86
	29	2	23	917	5	0	41	100	85
	29	2	26	917	5	0	8	100	87
	29	2	27	917	5	0	38	100	89
	29	3	1	938	5	0	18	100	79
	29	3	2	917	5	0	51	100	91
	29	3	4	917	5	0	61	100	90
	29	3	5	917	5	0	43	100	92
	29	3	5	941	5	0	323	100	91
	29	3	6	917	5	0	46	100	86
	29	3	10	917	5	0	37	100	89
	29	3	12	1626	5	0	40	100	95
	29	3	14	962	5	0	326	100	92
	29	3	15	959	5	0	79	100	89
	29	12	1	951	6	0	15	100	79
	29	12	8	917	2	0	7	100	86
181	29	3	1	1019	5	0	16	100	94
	29	11	6	1044	6	0	14	100	91
	29	11	12	1008	2	0	12	100	86
	29	11	22	1008	6	0	9	100	81
	29	11	25	1045	6	0	11	100	72
182	29	2	27	1012	5	0	57	100	97
	29	11	4	1012	2	0	4	100	89
	29	11	5	1565	6	0	5	100	86
	29	11	9	1012	6	0	10	100	78
	29	11	11	1012	6	0	8	100	80
	29	11	13	1012	6	0	6	100	85
	29	11	23	1012	6	0	17	100	85
	29	11	24	1012	6	0	13	100	65
	29	11	28	1012	6	0	16	100	80
232	29	2	23	1138	5	0	44	100	97
	29	2	23	1549	5	0	328	100	95
	29	2	24	1140	5	0	5	100	97
	29	2	25	1141	5	0	6	100	93
	29	2	26	1549	5	0	54	100	93
	29	2	27	1140	5	0	17	100	95
	29	2	28	1141	5	0	56	100	95
	29	3	1	1549	5	0	13	100	96
	29	3	5	1659	5	0	14	100	90
	29	3	6	1549	5	0	26	100	87
	29	3	7	1147	5	0	10	100	93
	29	3	7	1138	5	0	83	100	95
	29	3	7	1601	5	0	349	100	94

Table 3 (cont'd)

Section	Gear	Month	Day	Location	Source	Preservative	Sample number	Number of fish sampled	Number of fish aged
232	29	3	8	1659	5	0	23	100	92
	29	3	9	1413	5	0	24	100	95
	29	3	9	1755	5	0	347	100	96
	29	3	11	1507	5	0	25	100	90
	29	3	12	1142	5	0	69	100	92
	29	3	12	1154	5	0	88	100	94
	29	3	12	1143	0	0	94	100	91
	29	3	12	1144	0	0	99	100	93
	29	3	12	1143	0	0	102	100	94
	29	3	12	1144	0	0	103	100	86
	29	3	12	1143	0	0	104	100	94
	29	3	12	1142	0	0	105	100	85
	29	3	12	1143	0	0	106	100	93
	29	3	12	1141	0	0	110	100	93
	29	3	12	1141	0	0	113	100	82
	29	3	12	1143	0	0	115	100	91
	29	3	12	1159	0	0	116	100	63
	29	3	12	1143	0	0	118	100	95
	29	3	12	1142	0	0	120	100	91
	29	3	14	1142	5	0	119	100	96
	29	3	15	1142	5	0	117	100	95
	29	3	16	1142	5	0	67	100	95
	29	3	18	1142	5	0	80	100	86
	29	3	18	1159	5	0	112	100	91
	29	3	19	1142	5	0	121	100	87
	29	3	2	1119	5	0	55	100	95
	29	3	6	1544	5	0	29	100	96
239	59	2	19	1169	3	0	70	100	91
	59	2	20	1169	3	0	45	86	74
	59	3	19	1169	3	0	153	100	91
	59	8	19	1178	3	0	19	14	6
	59	8	21	1168	3	0	18	21	19
243	29	2	28	1205	5	0	22	100	97
	29	3	1	1205	5	0	27	100	95
	59	8	17	1212	2	0	1	10	8
	59	8	17	1205	2	0	2	100	53
244	29	2	28	1182	5	0	21	100	94
	29	3	2	1194	5	0	28	100	93
252	29	3	1	1282	5	0	312	100	95
253	1	2	25	1262	4	0	84	94	92
	19	3	12	1657	0	0	301	100	93
	19	3	12	1262	0	0	122	81	48
	19	3	12	1657	0	0	124	100	72
	19	3	12	1657	0	0	131	100	69
	19	3	12	1657	0	0	134	100	61
	19	3	12	1262	0	0	138	94	60
	19	3	12	1262	0	0	142	100	62
	19	3	12	1657	0	0	143	100	85

Table 3 (cont'd)

Section	Gear	Month	Day	Location	Source	Preservative	Sample number	Number of fish sampled	Number of fish aged
253	29	2	24	1259	5	0	89	100	95
	29	2	25	1259	5	0	91	100	88
	29	2	27	1259	5	0	90	100	95
	29	2	28	1266	5	0	81	100	94
	29	3	6	1397	5	0	87	100	90
	29	3	6	1266	5	0	145	100	93
	29	3	8	1273	5	0	300	100	98
272	29	3	15	1313	5	0	85	100	93
273	29	3	16	1319	5	0	86	100	95
	29	3	17	1318	5	0	82	100	94

Table 4. Codings for British Columbia herring sampling data.

A. Gear	B. Source	C. Preservative
19 Gillnet	0 Roe fishery	0 Freeze
29 Herring seine	1 Bait fishery	1 None (fresh)
20 Salmon seine	2 Research - inshore	2 Salt
21 Other seine	3 Research - offshore	3 Other
70 Beach seine	4 Other	4 Brine
50 Other trawl	5 Pre-fishery charter	
59 Herring trawl	6 Food	
01 Other		

Table 5. Week numbers for Pacific herring data for the 1986-87 season.

Week number	Duration	Week number	Duration
1	July 1-5	27	Dec. 28-Jan. 3
2	July 6-12	28	Jan. 4-10
3	July 13-19	29	Jan. 11-17
4	July 20-26	30	Jan. 18-24
5	July 27-Aug. 2	31	Jan. 25-31
6	Aug. 3-9	32	Feb. 1-7
7	Aug. 10-16	33	Feb. 8-14
8	Aug. 17-23	34	Feb. 15-21
9	Aug. 24-30	35	Feb. 22-28
10	Aug. 31-Sept. 6	36	Mar. 1-7
11	Sept. 7-13	37	Mar. 8-14
12	Sept. 14-20	38	Mar. 15-21
13	Sept. 21-27	39	Mar. 22-28
14	Sept. 28-Oct. 4	40	Mar. 29-Apr. 4
15	Oct. 5-11	41	Apr. 5-11
16	Oct. 12-18	42	Apr. 12-18
17	Oct. 19-25	43	Apr. 19-25
18	Oct. 26-Nov. 1	44	Apr. 26-May 2
19	Nov. 2-8	45	May 3-9
20	Nov. 9-15	46	May 10-16
21	Nov. 16-22	47	May 17-23
22	Nov. 23-29	48	May 24-30
23	Nov. 30-Dec. 6	49	May 31-Jun. 6
24	Dec. 7-13	50	Jun. 7-13
25	Dec. 14-20	51	Jun. 14-20
26	Dec. 21-27	52	Jun. 21-27
		53	Jun. 28-30

Table 6. Maturity stages for Pacific herring. The descriptions of each stage are adapted from criteria developed for Atlantic herring (Bowers and Holliday 1961; Parrish and Saville 1965) and modified to suit the unique characteristics of Pacific herring which are exclusively winter-spring spawners.

Stage	State of maturity	Gonad appearance	Description	Timing
I.	Undeveloped	Thread-shaped	Virgin herring with small gonads, less than 2 mm broad. Accurate macroscopic determination of sex usually not possible.	Year-round for young herring usually less than 150 mm in standard length.
II.	Starting	Ribbon-shaped	Gonads increased in breadth to 3-5 mm. Sex determination possible. Testes reddish-gray colored and knife-shaped; ovaries reddish-wine colored and rounder. (The gonads of virgins and some repeat spawners cannot be differentiated macroscopically.)	Late spring and early summer.
III.	Developing	Tube-like	Gonads thickened, increased in breadth (5-15 mm) and elongated, but not extending full length of body cavity. Ovaries red to reddish-orange with granular appearance; testes reddish-gray with smooth texture.	Late summer and early fall.
IV.	Maturing	Prominent	Gonads extend full length of body cavity. Ovaries reddish-orange to yellow; eggs distinguishable, opaque, variable in size and separable. Testes mostly gray and will ooze milt if sliced with a knife. Blood vessels clearly visible in the ovary and testes walls.	Late fall and early winter (slightly earlier in males than females).
V.	Mature	Bulging	No blood vessels visible in gonad walls. Ovaries gold-yellow; eggs mostly transparent and uniform in size. Eggs can be exuded from the ovary under pressure and are adhesive on contact. Testes milk-white; sperm will flow under pressure.	Early winter for males, late winter for females.
VI.	Ripe	Running	Eggs transparent. Eggs and sperm flow easily without external pressure.	A few days prior to spawning (usually in late winter or early spring).
VII.	Spent	Baggy	Gonads slack. Ovaries may contain a few residual eggs. Testes limp and bloodshot.	Early spring for the first few weeks following spawning.
VIII.	Recovering	Compressed	Gonads wine-colored and usually longer and thicker than in Stage II. Blood vessels prominent. (This stage passes into Stage III, but may resemble Stage II in the process.)	Late spring and early summer.

TABLE 7 TRAWL RESEARCH SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 239 - OFFSHORE AREA 23
SAMPLE NUMBERS: 18, 19
SOURCE: RESEARCH - OFFSHORE
GEAR: HERRING TRAWL
WEEK: 8 DATE: AUG 19/86 - AUG 21/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	6	2	9	6	1	1	0	0	0	10	35
% AT AGE	0.00	24.00	8.00	36.00	24.00	4.00	4.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	141.33	184.00	200.44	204.67	227.00	230.00	0.00	0.00	0.00	151.40	177.69
- STD. DEV.	0.00	6.86	7.07	6.25	5.72	0.00	0.00	0.00	0.00	0.00	27.38	32.82
WEIGHT - MEAN(gm)	0.00	35.33	97.00	128.44	133.17	186.00	172.00	0.00	0.00	0.00	52.20	92.60
- STD. DEV.	0.00	5.50	5.66	13.55	18.35	0.00	0.00	0.00	0.00	0.00	40.52	51.63

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	4	17	14	0	0	0	0	0	0
% AT STAGE	11.43	48.57	40.00	0.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	17	0	0	17
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	1.04	0.00	0.00	1.04

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	13	17	5	35
%	37.14	48.57	14.29	100.00
MEAN WEIGHT	96.00	107.12	34.40	92.60
% SAMP. WT.	38.51	56.19	5.31	100.00

TABLE 7 (CONT.) TRAWL RESEARCH SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 239 - OFFSHORE AREA 23
SAMPLE NUMBERS: 70, 45
SOURCE: RESEARCH - OFFSHORE
GEAR: HERRING TRAWL
WEEK: 34 DATE: FEB 19/87 - FEB 20/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	82	55	21	5	0	0	2	0	0	21	186
% AT AGE	0.00	49.70	33.33	12.73	3.03	0.00	0.00	1.21	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	173.60	189.04	203.14	214.60	0.00	0.00	248.50	0.00	0.00	177.57	183.85
- STD. DEV.	0.00	8.85	8.59	12.56	10.38	0.00	0.00	2.12	0.00	0.00	12.94	16.29
WEIGHT - MEAN(gm)	0.00	67.44	91.60	117.14	136.00	0.00	0.00	208.50	0.00	0.00	74.43	84.34
- STD. DEV.	0.00	12.11	14.49	21.28	35.74	0.00	0.00	19.09	0.00	0.00	18.89	27.51

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	42	6	112	24	1	0	0	0
% AT STAGE	0.54	22.58	3.23	60.22	12.90	0.54	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	80	8	0	88
%	90.91	9.09	0.00	100.00
% SAMPLE WEIGHT	11.63	1.89	0.00	13.52

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	96	88	2	186
%	51.61	47.31	1.08	100.00
MEAN WEIGHT	78.96	90.94	52.50	84.34
% SAMP. WT.	48.32	51.01	0.67	100.00

TABLE 7 (CONT.) TRAWL RESEARCH SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 239 - OFFSHORE AREA 23
SAMPLE NUMBERS: 153
SOURCE: RESEARCH - OFFSHORE
GEAR: HERRING TRAWL
WEEK: 38 DATE: MAR 19/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	3	13	42	27	4	1	1	0	0	9	100
% AT AGE	0.00	3.30	14.29	46.15	29.67	4.40	1.10	1.10	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	160.00	193.31	206.90	213.96	225.00	221.00	231.00	0.00	0.00	208.56	206.89
- STD. DEV.	0.00	16.09	9.99	8.35	6.67	8.91	0.00	0.00	0.00	0.00	12.55	14.10
WEIGHT - MEAN(gm)	0.00	56.67	83.85	97.64	109.41	125.25	107.00	147.00	0.00	0.00	104.22	100.08
- STD. DEV.	0.00	17.10	9.10	13.03	9.52	13.67	0.00	0.00	0.00	0.00	25.54	18.34

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	1	4	0	0	88	6	0
% AT STAGE	0.00	1.00	1.00	4.00	0.00	0.00	88.00	6.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	3	0	50	53
%	5.66	0.00	94.34	100.00
% SAMPLE WEIGHT	0.41	0.00	1.72	2.13

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	44	53	3	100
%	44.00	53.00	3.00	100.00
MEAN WEIGHT	97.23	102.06	107.00	100.08
% SAMP. WT.	42.75	54.05	3.21	100.00

TABLE 7 (CONT.) TRAWL RESEARCH SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 243 - SYDNEY INLET
SAMPLE NUMBERS: 2, 1
SOURCE: RESEARCH - INSHORE
GEAR: HERRING TRAWL
WEEK: 8 DATE: AUG 17/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	58	3	0	0	0	0	0	0	0	49	110
% AT AGE	0.00	95.08	4.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	128.02	167.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	126.20	128.29
- STD. DEV.	0.00	9.54	26.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.97	12.58
WEIGHT - MEAN(gm)	0.00	26.76	55.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.80	27.10
- STD. DEV.	0.00	5.93	23.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.00	8.49

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	2	0	0	0	0	0	0	108
% AT STAGE	0.00	1.82	0.00	0.00	0.00	0.00	0.00	0.00	98.18

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	2	0	0	2
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	0.00	0.00	0.00	0.00

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	0	2	108	110
%	0.00	1.82	98.18	100.00
MEAN WEIGHT	0.00	68.00	26.34	27.10
% SAMP. WT.	0.00	4.56	95.44	100.00

TABLE 8 SEINE RESEARCH SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 172 - NANOOSE BAY
SAMPLE NUMBERS: 3
SOURCE: RESEARCH - INSHORE
GEAR: HERRING SEINE
WEEK: 23 DATE: DEC 3/86

SPECIMENS AT EACH AGE:

	AGE 1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	1	43	28	18	1	0	0	0	0	0	9	100
% AT AGE	1.10	47.25	30.77	19.78	1.10	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	114.00	145.07	185.32	200.67	211.00	0.00	0.00	0.00	0.00	0.00	182.56	170.07
- STD. DEV.	0.00	12.56	13.54	7.64	0.00	0.00	0.00	0.00	0.00	0.00	30.41	27.78
WEIGHT - MEAN(gm)	18.00	41.26	95.71	119.44	143.00	0.00	0.00	0.00	0.00	0.00	95.67	76.26
- STD. DEV.	0.00	13.22	18.79	15.22	0.00	0.00	0.00	0.00	0.00	0.00	48.71	38.65

HJORT MATURITY STAGES:

	MATURITY STAGE 1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	20	17	27	36	0	0	0	0	0
% AT STAGE	20.00	17.00	27.00	36.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	36	0	0	36
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	6.15	0.00	0.00	6.15

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	41	36	23	100
%	41.00	36.00	23.00	100.00
MEAN WEIGHT	88.39	89.89	33.30	76.26
% SAMP. WT.	47.52	42.43	10.04	100.00

TABLE 8 (CONT.) SEINE RESEARCH SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 173 - YELLOW POINT
SAMPLE NUMBERS: 7
SOURCE: RESEARCH - INSHORE
GEAR: HERRING SEINE
WEEK: 24 DATE: DEC 8/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	1	38	31	15	0	1	0	0	0	0	14	100
% AT AGE	1.16	44.19	36.05	17.44	0.00	1.16	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	110.00	160.53	184.42	194.80	0.00	200.00	0.00	0.00	0.00	0.00	186.29	176.57
- STD. DEV.	0.00	16.52	14.40	11.94	0.00	0.00	0.00	0.00	0.00	0.00	12.14	20.89
WEIGHT - MEAN(gm)	14.00	57.71	91.03	105.33	0.00	123.00	0.00	0.00	0.00	0.00	92.36	80.25
- STD. DEV.	0.00	18.02	21.41	20.07	0.00	0.00	0.00	0.00	0.00	0.00	21.86	28.11

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	3	11	11	75	0	0	0	0	0
% AT STAGE	3.00	11.00	11.00	75.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	49	0	0	49
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	5.58	0.00	0.00	5.58

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	45	49	6	100
%	45.00	49.00	6.00	100.00
MEAN WEIGHT	84.98	81.98	30.67	80.25
% SAMP. WT.	47.65	50.06	2.29	100.00

TABLE 8 (CONT.) SEINE RESEARCH SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 173 - YELLOW POINT
SAMPLE NUMBERS: 150
SOURCE: RESEARCH - INSHORE
GEAR: HERRING SEINE
WEEK: 29 DATE: JAN 15/87

SPECIMENS AT EACH AGE:

	AGE 1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	10	25	47	7	1	1	0	0	0	9	100
% AT AGE	0.00	10.99	27.47	51.65	7.69	1.10	1.10	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	176.00	190.84	201.87	209.86	220.00	205.00	0.00	0.00	0.00	188.00	196.05
- STD. DEV.	0.00	8.00	13.47	11.26	3.85	0.00	0.00	0.00	0.00	0.00	12.90	14.58
WEIGHT - MEAN(gm)	0.00	71.30	96.12	119.89	140.86	147.00	131.00	0.00	0.00	0.00	95.67	108.76
- STD. DEV.	0.00	8.77	19.27	20.61	6.69	0.00	0.00	0.00	0.00	0.00	21.30	26.13

HJORT MATURITY STAGES:

	MATURITY STAGE 1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	91	9	0	0	0	0
% AT STAGE	0.00	0.00	0.00	91.00	9.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	52	0	0	52
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	11.56	0.00	0.00	11.56

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	48	52	0	100
%	48.00	52.00	0.00	100.00
MEAN WEIGHT	100.27	116.60	0.00	108.76
% SAMP. WT.	44.25	55.75	0.00	100.00

TABLE 8 (CONT.) SEINE RESEARCH SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 173 - YELLOW POINT
SAMPLE NUMBERS: 151, 152
SOURCE: RESEARCH - INSHORE
GEAR: HERRING SEINE
WEEK: 31 DATE: JAN 30/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	53	49	51	18	2	3	0	0	0	24	200
% AT AGE	0.00	30.11	27.84	28.98	10.23	1.14	1.70	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	175.57	189.67	199.73	212.56	212.50	229.67	0.00	0.00	0.00	183.46	190.64
- STD. DEV.	0.00	6.68	10.44	7.75	10.67	10.61	9.29	0.00	0.00	0.00	9.95	15.33
WEIGHT - MEAN(gm)	0.00	71.81	94.31	113.71	140.78	159.50	197.67	0.00	0.00	0.00	83.25	98.35
- STD. DEV.	0.00	9.73	18.59	15.48	26.45	19.09	19.40	0.00	0.00	0.00	16.67	29.91

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	7	3	178	12	0	0	0	0
% AT STAGE	0.00	3.50	1.50	89.00	6.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	109	0	0	109
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	14.68	0.00	0.00	14.68

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	88	109	3	200
%	44.00	54.50	1.50	100.00
MEAN WEIGHT	90.15	105.83	67.33	98.35
% SAMP. WT.	40.33	58.64	1.03	100.00

TABLE 8 (CONT.) SEINE RESEARCH SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 181 - OTHER AREA 18
SAMPLE NUMBERS: 12
SOURCE: RESEARCH - INSHORE
GEAR: HERRING SEINE
WEEK: 20 DATE: NOV 12/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	77	9	0	0	0	0	0	0	0	14	100
% AT AGE	0.00	89.53	10.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	140.03	181.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	165.21	147.32
- STD. DEV.	0.00	13.76	11.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.54	20.16
WEIGHT - MEAN(gm)	0.00	39.26	88.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.00	47.96
- STD. DEV.	0.00	15.19	16.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.32	23.48

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	24	37	26	13	0	0	0	0	0
% AT STAGE	24.00	37.00	26.00	13.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	30	0	0	30
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	1.96	0.00	0.00	1.96

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	35	30	35	100
%	35.00	30.00	35.00	100.00
MEAN WEIGHT	61.14	50.93	32.23	47.96
% SAMP. WT.	44.62	31.86	23.52	100.00

TABLE 8 (CONT.) SEINE RESEARCH SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 182 - PLUMPER SOUND
SAMPLE NUMBERS: 4
SOURCE: RESEARCH - INSHORE
GEAR: HERRING SEINE
WEEK: 19 DATE: NOV 4/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	22	41	22	4	0	0	0	0	0	11	100
% AT AGE	0.00	24.72	46.07	24.72	4.49	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	171.91	191.90	200.14	202.75	0.00	0.00	0.00	0.00	0.00	178.73	188.30
- STD. DEV.	0.00	12.87	8.70	12.22	16.28	0.00	0.00	0.00	0.00	0.00	9.38	15.14
WEIGHT - MEAN(gm)	0.00	72.73	107.29	124.77	140.50	0.00	0.00	0.00	0.00	0.00	85.00	102.41
- STD. DEV.	0.00	15.24	17.69	22.58	35.38	0.00	0.00	0.00	0.00	0.00	12.57	27.33

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	4	36	59	0	0	0	0	0
% AT STAGE	1.00	4.00	36.00	59.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	31	0	0	31
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	4.74	0.00	0.00	4.74

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	68	31	1	100
%	68.00	31.00	1.00	100.00
MEAN WEIGHT	100.10	108.94	57.00	102.41
% SAMP. WT.	66.47	32.98	0.56	100.00

TABLE 9 SEINE COMMERCIAL FOOD SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 173 - YELLOW POINT
SAMPLE NUMBERS: 15
SOURCE: FOOD FISHERY
GEAR: HERRING SEINE
WEEK: 23 DATE: DEC 1/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	33	33	10	3	0	0	0	0	0	21	100
% AT AGE	0.00	41.77	41.77	12.66	3.80	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.45	180.88	196.80	216.00	0.00	0.00	0.00	0.00	0.00	175.62	177.33
- STD. DEV.	0.00	10.92	9.60	10.14	5.29	0.00	0.00	0.00	0.00	0.00	15.49	16.19
WEIGHT - MEAN(gm)	0.00	66.00	85.61	112.90	146.67	0.00	0.00	0.00	0.00	0.00	81.14	82.76
- STD. DEV.	0.00	15.13	14.22	20.35	22.50	0.00	0.00	0.00	0.00	0.00	19.64	24.03

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	2	18	58	22	0	0	0	0	0
% AT STAGE	2.00	18.00	58.00	22.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	56	0	0	56
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	5.15	0.00	0.00	5.15

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	31	56	13	100
%	31.00	56.00	13.00	100.00
MEAN WEIGHT	80.94	88.07	64.23	82.76
% SAMP. WT.	30.32	59.59	10.09	100.00

TABLE 9 (CONT.) SEINE COMMERCIAL FOOD SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 181 - OTHER AREA 18
SAMPLE NUMBERS: 14
SOURCE: FOOD FISHERY
GEAR: HERRING SEINE
WEEK: 19 DATE: NOV 6/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	25	36	21	8	1	0	0	0	0	9	100
% AT AGE	0.00	27.47	39.56	23.08	8.79	1.10	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	175.24	191.22	203.95	206.63	206.00	0.00	0.00	0.00	0.00	184.56	190.68
- STD. DEV.	0.00	7.55	9.25	9.52	8.38	0.00	0.00	0.00	0.00	0.00	9.68	14.10
WEIGHT - MEAN(gm)	0.00	78.08	106.22	128.86	145.88	129.00	0.00	0.00	0.00	0.00	94.00	106.24
- STD. DEV.	0.00	11.13	16.17	20.49	26.20	0.00	0.00	0.00	0.00	0.00	15.05	26.99

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	5	67	28	0	0	0	0	0
% AT STAGE	0.00	5.00	67.00	28.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	51	0	0	51
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	5.01	0.00	0.00	5.01

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	47	51	2	100
%	47.00	51.00	2.00	100.00
MEAN WEIGHT	103.87	110.02	65.50	106.24
% SAMP. WT.	45.95	52.81	1.23	100.00

TABLE 9 (CONT.) SEINE COMMERCIAL FOOD SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 181 - OTHER AREA 18
SAMPLE NUMBERS: 9
SOURCE: FOOD FISHERY
GEAR: HERRING SEINE
WEEK: 21 DATE: NOV 22/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	13	29	26	12	1	0	0	0	0	19	100
% AT AGE	0.00	16.05	35.80	32.10	14.81	1.23	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	174.08	191.48	203.31	212.17	222.00	0.00	0.00	0.00	0.00	185.84	194.01
- STD. DEV.	0.00	7.54	9.68	8.23	11.48	0.00	0.00	0.00	0.00	0.00	15.45	15.68
WEIGHT - MEAN(gm)	0.00	76.54	102.90	125.19	147.83	179.00	0.00	0.00	0.00	0.00	97.37	110.37
- STD. DEV.	0.00	12.18	14.55	18.21	25.05	0.00	0.00	0.00	0.00	0.00	23.77	28.44

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	47	52	0	0	0	0	0
% AT STAGE	0.00	1.00	47.00	52.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	43	0	0	43
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	5.67	0.00	0.00	5.67

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	57	43	0	100
%	57.00	43.00	0.00	100.00
MEAN WEIGHT	102.96	120.19	0.00	110.37
% SAMP. WT.	53.18	46.82	0.00	100.00

TABLE 9 (CONT.) SEINE COMMERCIAL FOOD SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 181 - OTHER AREA 18
SAMPLE NUMBERS: 11
SOURCE: FOOD FISHERY
GEAR: HERRING SEINE
WEEK: 22 DATE: NOV 25/86

SPECIMENS AT EACH AGE:

	AGE 1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	13	29	23	5	2	0	0	0	0	28	100
% AT AGE	0.00	18.06	40.28	31.94	6.94	2.78	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	172.62	189.72	201.26	210.60	214.50	0.00	0.00	0.00	0.00	179.68	188.88
- STD. DEV.	0.00	9.29	8.27	8.26	9.91	4.95	0.00	0.00	0.00	0.00	10.90	14.60
WEIGHT - MEAN(gm)	0.00	75.15	100.48	122.91	149.40	148.00	0.00	0.00	0.00	0.00	85.39	101.52
- STD. DEV.	0.00	10.38	15.90	17.46	15.68	7.07	0.00	0.00	0.00	0.00	18.96	26.30

HJORT MATURITY STAGES:

	MATURITY STAGE 1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	35	65	0	0	0	0	0
% AT STAGE	0.00	0.00	35.00	65.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	55	0	0	55
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	5.63	0.00	0.00	5.63

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	45	55	0	100
%	45.00	55.00	0.00	100.00
MEAN WEIGHT	104.76	98.87	0.00	101.52
% SAMP. WT.	46.43	53.57	0.00	100.00

TABLE 9 (CONT.) SEINE COMMERCIAL FOOD SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 182 - PLUMPER SOUND
SAMPLE NUMBERS: 5
SOURCE: FOOD FISHERY
GEAR: HERRING SEINE
WEEK: 19 DATE: NOV 5/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	7	25	38	13	2	1	0	0	0	14	100
% AT AGE	0.00	8.14	29.07	44.19	15.12	2.33	1.16	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	172.71	190.20	205.03	211.23	213.50	235.00	0.00	0.00	0.00	190.07	198.24
- STD. DEV.	0.00	11.60	8.28	12.00	9.74	0.71	0.00	0.00	0.00	0.00	16.31	15.97
WEIGHT - MEAN(gm)	0.00	75.57	102.92	133.71	144.85	152.50	215.00	0.00	0.00	0.00	102.57	120.22
- STD. DEV.	0.00	17.31	12.24	26.85	16.88	9.19	0.00	0.00	0.00	0.00	28.64	31.45

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	2	53	45	0	0	0	0	0
% AT STAGE	0.00	2.00	53.00	45.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	32	0	0	32
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	4.96	0.00	0.00	4.96

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	68	32	0	100
%	68.00	32.00	0.00	100.00
MEAN WEIGHT	116.62	127.88	0.00	120.22
% SAMP. WT.	65.96	34.04	0.00	100.00

TABLE 9 (CONT.) SEINE COMMERCIAL FOOD SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 182 - PLUMPER SOUND
SAMPLE NUMBERS: 10, 8, 6
SOURCE: FOOD FISHERY
GEAR: HERRING SEINE
WEEK: 20 DATE: NOV 9/86 - NOV 13/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	59	85	76	17	5	0	1	0	0	57	300
% AT AGE	0.00	24.28	34.98	31.28	7.00	2.06	0.00	0.41	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	155.31	188.20	199.54	216.24	224.60	0.00	229.00	0.00	0.00	172.07	183.87
- STD. DEV.	0.00	19.49	9.48	8.99	11.60	16.13	0.00	0.00	0.00	0.00	22.70	24.00
WEIGHT - MEAN(gm)	0.00	54.93	101.21	122.30	167.88	187.60	0.00	214.00	0.00	0.00	77.30	98.50
- STD. DEV.	0.00	20.78	15.90	18.00	23.49	35.73	0.00	0.00	0.00	0.00	31.22	39.02

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	20	27	135	118	0	0	0	0	0
% AT STAGE	6.67	9.00	45.00	39.33	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	122	0	0	122
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	4.91	0.00	0.00	4.91

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	152	122	26	300
%	50.67	40.67	8.67	100.00
MEAN WEIGHT	100.95	109.08	34.58	98.50
% SAMP. WT.	51.92	45.03	3.04	100.00

TABLE 9 (CONT.) SEINE COMMERCIAL FOOD SAMPLE SUMMARIES BY SECTION AND WEEK

SECTION: 182 - PLUMPER SOUND
SAMPLE NUMBERS: 13, 17, 16
SOURCE: FOOD FISHERY
GEAR: HERRING SEINE
WEEK: 22 DATE: NOV 23/86 - NOV 28/86

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	42	69	79	30	6	3	1	0	0	70	300
% AT AGE	0.00	18.26	30.00	34.35	13.04	2.61	1.30	0.43	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	168.29	189.06	203.65	211.60	219.17	226.33	218.00	0.00	0.00	185.51	192.49
- STD. DEV.	0.00	8.24	8.25	8.25	10.51	9.68	6.66	0.00	0.00	0.00	19.47	18.34
WEIGHT - MEAN(gm)	0.00	68.52	100.07	129.89	152.60	174.00	181.33	188.00	0.00	0.00	97.36	110.71
- STD. DEV.	0.00	10.97	16.58	18.17	26.21	22.56	18.18	0.00	0.00	0.00	35.91	35.80

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	3	17	114	166	0	0	0	0	0
% AT STAGE	1.00	5.67	38.00	55.33	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	163	0	0	163
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	6.13	0.00	0.00	6.13

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	132	163	5	300
%	44.00	54.33	1.67	100.00
MEAN WEIGHT	107.79	115.03	47.00	110.71
% SAMP. WT.	42.84	56.45	0.71	100.00

TABLE 10 SEINE ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 21 - OTHER AREA 2E
SAMPLE NUMBERS: 258,266,284,271,304,264,253,272,245,265
SOURCE: ROE FISHERY
GEAR: HERRING SEINE
DATE: MAR 20/87

SPECIMENS AT EACH AGE:

	AGE 1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	12	79	45	230	367	39	32	56	50	90	1000
% AT AGE	0.00	1.32	8.68	4.95	25.27	40.33	4.29	3.52	6.15	5.49	0.00	100.00
LENGTH - MEAN(mm)	0.00	170.58	195.92	208.20	215.67	221.23	224.23	230.31	231.27	233.86	209.96	217.34
- STD. DEV.	0.00	6.68	8.35	7.26	7.95	8.69	10.05	9.13	7.88	8.73	18.77	14.30
WEIGHT - MEAN(gm)	0.00	67.00	107.89	130.38	149.53	165.92	172.82	177.50	185.43	194.20	138.56	155.46
- STD. DEV.	0.00	8.93	17.90	16.63	21.78	23.33	22.85	24.04	27.11	23.51	36.89	33.18

HJORT MATURITY STAGES:

	MATURITY STAGE 1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	56	862	77	5	0	0
% AT STAGE	0.00	0.00	0.00	5.60	86.20	7.70	0.50	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	6	422	2	430
%	1.40	98.14	0.47	100.00
% SAMPLE WEIGHT	0.28	28.75	0.01	29.04

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	570	430	0	1000
%	57.00	43.00	0.00	100.00
MEAN WEIGHT	147.72	165.73	0.00	155.46
% SAMP. WT.	54.16	45.84	0.00	100.00

TABLE 10 (CONT.) SEINE ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 52 - KITKATLA CHANNEL
SAMPLE NUMBERS: 173,310,254,185,175,170,178,311,276,249, 169
SOURCE: ROE FISHERY
GEAR: HERRING SEINE
DATE: MAR 31/87 - APR 1/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	5	350	92	82	294	56	43	28	13	137	1100
% AT AGE	0.00	0.52	36.34	9.55	8.52	30.53	5.82	4.47	2.91	1.35	0.00	100.00
LENGTH - MEAN(mm)	0.00	172.20	186.43	199.96	210.73	214.51	219.13	222.98	226.79	232.23	193.90	202.41
- STD. DEV.	0.00	7.60	8.75	8.18	8.77	9.25	9.13	9.49	9.95	9.12	19.81	17.72
WEIGHT - MEAN(gm)	0.00	70.00	87.46	109.53	128.94	140.89	155.38	157.37	173.79	180.38	102.74	117.99
- STD. DEV.	0.00	13.84	13.94	16.35	16.84	21.44	26.93	23.02	23.84	20.74	33.26	34.48

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	102	957	38	2	0	1
% AT STAGE	0.00	0.00	0.00	9.27	87.00	3.45	0.18	0.00	0.09

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	9	535	0	544
%	1.65	98.35	0.00	100.00
% SAMPLE WEIGHT	0.27	27.35	0.00	27.61

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	555	544	1	1100
%	50.45	49.45	0.09	100.00
MEAN WEIGHT	114.81	121.31	77.00	117.99
% SAMP. WT.	49.10	50.85	0.06	100.00

TABLE 10 (CONT.) SEINE ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 72 - POWELL ANCHORAGE
SAMPLE NUMBERS: 176,182
SOURCE: ROE FISHERY
GEAR: HERRING SEINE
DATE: MAR 25/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	6	46	13	48	11	11	18	5	8	34	200
% AT AGE	0.00	3.61	27.71	7.83	28.92	6.63	6.63	10.84	3.01	4.82	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.83	183.65	205.62	213.69	221.27	218.45	222.28	231.40	234.88	194.21	204.25
- STD. DEV.	0.00	7.28	9.04	7.62	8.62	9.72	11.18	14.34	15.45	6.88	21.51	21.14
WEIGHT - MEAN(gm)	0.00	69.33	89.57	132.08	151.04	170.91	169.00	177.00	205.40	200.25	116.32	135.06
- STD. DEV.	0.00	11.24	18.51	21.94	24.90	31.39	43.32	39.89	48.14	36.20	49.82	48.58

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	31	157	10	2	0	0
% AT STAGE	0.00	0.00	0.00	15.50	78.50	5.00	1.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	12	102	1	115
%	10.43	88.70	0.87	100.00
% SAMPLE WEIGHT	1.84	27.32	0.02	29.18

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	85	115	0	200
%	42.50	57.50	0.00	100.00
MEAN WEIGHT	120.72	145.66	0.00	135.06
% SAMP. WT.	37.99	62.01	0.00	100.00

TABLE 10 (CONT.) SEINE ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 74 - THOMPSON BAY
SAMPLE NUMBERS: 252,244,247,184,188,181,243,290,248
SOURCE: ROE FISHERY
GEAR: HERRING SEINE
DATE: MAR 25/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	16	118	97	296	54	46	66	46	71	86	896
% AT AGE	0.00	1.98	14.57	11.98	36.54	6.67	5.68	8.15	5.68	8.77	0.00	100.00
LENGTH - MEAN(mm)	0.00	170.19	189.47	204.57	215.93	224.35	225.63	228.70	230.26	236.14	200.08	213.16
- STD. DEV.	0.00	9.45	10.68	10.69	9.97	8.75	9.88	10.49	11.19	9.14	23.54	19.20
WEIGHT - MEAN(gm)	0.00	70.06	98.82	131.69	157.60	182.48	191.24	194.55	198.20	219.51	125.57	155.35
- STD. DEV.	0.00	13.64	21.02	27.74	27.31	24.34	32.75	32.74	37.67	31.40	52.67	48.08

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	1	0	111	758	21	4	0	0
% AT STAGE	0.11	0.11	0.00	12.39	84.60	2.34	0.45	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	25	469	3	497
%	5.03	94.37	0.60	100.00
% SAMPLE WEIGHT	0.89	29.11	0.00	30.00

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	398	497	1	896
%	44.42	55.47	0.11	100.00
MEAN WEIGHT	145.87	163.20	33.00	155.35
% SAMP. WT.	41.71	58.27	0.02	100.00

TABLE 10 (CONT.) SEINE ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 152 - LUND
SAMPLE NUMBERS: 92,126,132,136, 95, 96,144,149,123,114, 101,135
SOURCE: ROE FISHERY
GEAR: HERRING SEINE
DATE: MAR 14/87 - MAR 15/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	23	406	421	193	27	6	5	2	0	116	1199
% AT AGE	0.00	2.12	37.49	38.87	17.82	2.49	0.55	0.46	0.18	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	162.09	184.36	192.94	201.46	203.67	214.33	216.20	217.50	0.00	190.58	191.07
- STD. DEV.	0.00	15.08	10.68	10.09	11.44	12.20	10.86	7.12	0.71	0.00	14.34	13.54
WEIGHT - MEAN(gm)	0.00	52.70	78.84	93.29	110.75	112.11	141.33	146.60	135.00	0.00	90.28	91.09
- STD. DEV.	0.00	13.24	15.36	16.97	22.68	27.57	25.24	18.39	9.90	0.00	22.16	22.71

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	0	0	143	969	25	61	0	0
% AT STAGE	0.08	0.00	0.00	11.93	80.82	2.09	5.09	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	29	488	20	537
%	5.40	90.88	3.72	100.00
% SAMPLE WEIGHT	1.08	23.61	0.05	24.74

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	661	537	1	1199
%	55.13	44.79	0.08	100.00
MEAN WEIGHT	86.75	96.50	56.00	91.09
% SAMP. WT.	52.50	47.45	0.05	100.00

TABLE 10 (CONT.) SEINE ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 232 - MACOAH PASS
SAMPLE NUMBERS: 105,116, 94,103,102, 99,113,110,120,118, 106,104,115
SOURCE: ROE FISHERY
GEAR: HERRING SEINE
DATE: MAR 12/87

SPECIMENS AT EACH AGE:

	AGE 1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	158	205	429	204	100	26	12	16	1	149	1300
% AT AGE	0.00	13.73	17.81	37.27	17.72	8.69	2.26	1.04	1.39	0.09	0.00	100.00
LENGTH - MEAN(mm)	0.00	172.73	194.06	210.37	219.97	227.31	236.27	236.58	239.63	233.00	198.29	205.79
- STD. DEV.	0.00	8.77	8.78	9.01	8.62	8.56	6.91	10.38	9.53	0.00	20.15	19.79
WEIGHT - MEAN(gm)	0.00	68.91	99.40	135.15	158.67	179.08	203.58	212.67	203.13	179.00	113.72	129.03
- STD. DEV.	0.00	11.89	16.12	21.09	22.68	25.26	24.12	20.54	32.71	0.00	37.43	41.40

HJORT MATURITY STAGES:

	MATURITY STAGE 1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	35	1247	15	3	0	0
% AT STAGE	0.00	0.00	0.00	2.69	95.92	1.15	0.23	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	6	603	1	610
%	0.98	98.85	0.16	100.00
% SAMPLE WEIGHT	0.16	28.99	0.00	29.15

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	690	610	0	1300
%	53.08	46.92	0.00	100.00
MEAN WEIGHT	122.45	136.47	0.00	129.03
% SAMP. WT.	50.37	49.63	0.00	100.00

TABLE 11 GILLNET ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 33 - PORT SIMPSON
SAMPLE NUMBERS: 281
SOURCE: ROE FISHERY
GEAR: GILLNET
DATE: MAR 29/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	0	1	3	7	57	10	6	2	1	13	100
% AT AGE	0.00	0.00	1.15	3.45	8.05	65.52	11.49	6.90	2.30	1.15	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	198.00	213.33	213.86	216.95	226.50	221.17	212.50	230.00	214.92	217.42
- STD. DEV.	0.00	0.00	0.00	8.62	7.17	7.98	10.11	7.39	17.68	0.00	7.83	8.98
WEIGHT - MEAN(gm)	0.00	0.00	122.00	135.67	140.00	148.40	164.50	154.00	169.00	202.00	136.92	148.57
- STD. DEV.	0.00	0.00	0.00	21.39	7.53	19.00	29.35	18.40	5.66	0.00	15.82	21.04

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	16	83	1	0	0	0
% AT STAGE	0.00	0.00	0.00	16.00	83.00	1.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	1	50	0	51
%	1.96	98.04	0.00	100.00
% SAMPLE WEIGHT	0.51	27.31	0.00	27.81

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	49	51	0	100
%	49.00	51.00	0.00	100.00
MEAN WEIGHT	146.55	150.51	0.00	148.57
% SAMP. WT.	48.33	51.67	0.00	100.00

TABLE 11 (CONT.) GILLNET ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 42 - BIG BAY
SAMPLE NUMBERS: 240,255,246,267,257,251,274,263,239,303, 259,268,305,256,294
SOURCE: ROE FISHERY
GEAR: GILLNET
DATE: MAR 24/87 - APR 2/87

SPECIMENS AT EACH AGE:

	AGE 1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	0	7	35	86	708	226	125	83	44	186	1500
% AT AGE	0.00	0.00	0.53	2.66	6.54	53.88	17.20	9.51	6.32	3.35	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	199.29	206.60	216.06	218.60	222.23	226.59	229.23	233.77	220.55	220.57
- STD. DEV.	0.00	0.00	9.83	7.20	6.46	7.35	8.28	8.04	8.47	10.04	9.41	9.22
WEIGHT - MEAN(gm)	0.00	0.00	106.57	125.54	140.20	148.17	152.96	157.28	163.75	177.82	151.53	150.62
- STD. DEV.	0.00	0.00	21.83	11.19	16.18	18.12	19.37	23.30	21.25	34.11	20.40	21.31

HJORT MATURITY STAGES:

	MATURITY STAGE 1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	1	49	1273	80	97	0	0
% AT STAGE	0.00	0.00	0.07	3.27	84.87	5.33	6.47	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	6	809	45	860
%	0.70	94.07	5.23	100.00
% SAMPLE WEIGHT	0.17	25.92	0.12	26.21

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	640	860	0	1500
%	42.67	57.33	0.00	100.00
MEAN WEIGHT	144.81	154.94	0.00	150.62
% SAMP. WT.	41.02	58.98	0.00	100.00

TABLE 11 (CONT.) GILLNET ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 43 - MALACCA PASSAGE
SAMPLE NUMBERS: 269,250,260,238
SOURCE: ROE FISHERY
GEAR: GILLNET
DATE: APR 2/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	0	2	15	29	208	47	24	20	15	40	400
% AT AGE	0.00	0.00	0.56	4.17	8.06	57.78	13.06	6.67	5.56	4.17	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	209.00	208.00	215.69	218.76	220.66	225.50	226.50	233.87	217.10	219.50
- STD. DEV.	0.00	0.00	1.41	5.48	7.31	8.18	9.06	10.00	7.69	9.89	9.61	9.49
WEIGHT - MEAN(gm)	0.00	0.00	131.50	131.67	141.52	149.67	151.94	153.29	160.05	178.13	143.93	149.81
- STD. DEV.	0.00	0.00	2.12	12.64	16.78	21.17	24.54	18.94	20.49	25.95	20.84	22.21

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	23	352	20	5	0	0
% AT STAGE	0.00	0.00	0.00	5.75	88.00	5.00	1.25	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	2	214	4	220
%	0.91	97.27	1.82	100.00
% SAMPLE WEIGHT	0.22	27.61	0.04	27.87

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	180	220	0	400
%	45.00	55.00	0.00	100.00
MEAN WEIGHT	144.74	153.95	0.00	149.81
% SAMP. WT.	43.48	56.52	0.00	100.00

TABLE 11 (CONT.) GILLNET ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 67 - KITASU BAY
SAMPLE NUMBERS: 275,261,242,273
SOURCE: ROE FISHERY
GEAR: GILLNET
DATE: MAR 30/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	0	1	27	120	58	27	35	36	37	59	400
% AT AGE	0.00	0.00	0.29	7.92	35.19	17.01	7.92	10.26	10.56	10.85	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	198.00	208.11	214.13	217.78	217.74	223.89	224.00	226.03	215.93	217.56
- STD. DEV.	0.00	0.00	0.00	5.54	6.48	6.64	6.45	8.76	6.32	8.41	9.53	8.84
WEIGHT - MEAN(gm)	0.00	0.00	113.00	138.52	146.42	153.24	147.26	160.51	162.67	169.59	150.44	152.28
- STD. DEV.	0.00	0.00	0.00	14.91	15.33	15.71	13.81	19.67	16.75	22.59	18.86	18.98

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	17	350	27	6	0	0
% AT STAGE	0.00	0.00	0.00	4.25	87.50	6.75	1.50	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	1	194	3	198
%	0.51	97.98	1.52	100.00
% SAMPLE WEIGHT	0.15	28.03	0.06	28.24

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	202	198	0	400
%	50.50	49.50	0.00	100.00
MEAN WEIGHT	148.88	155.75	0.00	152.28
% SAMP. WT.	49.37	50.63	0.00	100.00

TABLE 11 (CONT.) GILLNET ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 72 - POWELL ANCHORAGE
SAMPLE NUMBERS: 278,186,180,174
SOURCE: ROE FISHERY
GEAR: GILLNET
DATE: MAR 30/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	0	2	23	172	30	27	29	22	27	68	400
% AT AGE	0.00	0.00	0.60	6.93	51.81	9.04	8.13	8.73	6.63	8.13	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	208.00	211.30	220.39	223.37	228.56	228.86	235.18	234.15	219.41	222.77
- STD. DEV.	0.00	0.00	7.07	7.89	8.16	9.68	7.36	9.71	8.39	8.71	9.76	10.44
WEIGHT - MEAN(gm)	0.00	0.00	130.50	145.70	165.06	177.83	182.22	186.72	196.05	195.85	158.71	170.16
- STD. DEV.	0.00	0.00	3.54	11.20	23.75	28.75	27.39	29.20	28.14	33.35	22.02	28.37

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	0	0	21	360	5	13	0	0
% AT STAGE	0.25	0.00	0.00	5.25	90.00	1.25	3.25	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	1	228	4	233
%	0.43	97.85	1.72	100.00
% SAMPLE WEIGHT	0.13	28.91	0.05	29.09

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	167	233	0	400
%	41.75	58.25	0.00	100.00
MEAN WEIGHT	162.64	175.55	0.00	170.16
% SAMP. WT.	39.90	60.10	0.00	100.00

TABLE 11 (CONT.) GILLNET ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 74 - THOMPSON BAY
SAMPLE NUMBERS: 187,365,183,179
SOURCE: ROE FISHERY
GEAR: GILLNET
DATE: MAR 30/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	0	5	26	148	27	23	33	22	24	71	379
% AT AGE	0.00	0.00	1.62	8.44	48.05	8.77	7.47	10.71	7.14	7.79	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	203.60	212.19	218.24	222.48	225.96	226.70	229.18	232.67	217.85	220.61
- STD. DEV.	0.00	0.00	5.86	6.14	7.91	8.98	7.95	7.37	11.68	9.68	10.51	10.29
WEIGHT - MEAN(gm)	0.00	0.00	130.20	147.81	162.85	172.48	178.43	189.70	192.86	202.50	158.48	168.79
- STD. DEV.	0.00	0.00	5.26	12.21	22.66	23.08	22.65	20.52	38.60	32.41	25.58	28.54

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	41	330	8	0	0	0
% AT STAGE	0.00	0.00	0.00	10.82	87.07	2.11	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	0	166	0	166
%	0.00	100.00	0.00	100.00
% SAMPLE WEIGHT	0.00	29.67	0.00	29.67

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	213	166	0	379
%	56.20	43.80	0.00	100.00
MEAN WEIGHT	163.96	174.99	0.00	168.79
% SAMP. WT.	54.59	45.41	0.00	100.00

TABLE 11 (CONT.) GILLNET ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 142 - BAYNES SOUND
SAMPLE NUMBERS: 270,133, 98,127,262, 97,100,107,129,108,
241, 93,148,109,111,141
SOURCE: ROE FISHERY
GEAR: GILLNET
DATE: MAR 9/87 - MAR 18/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	0	25	418	440	225	124	34	7	4	323	1600
% AT AGE	0.00	0.00	1.96	32.73	34.46	17.62	9.71	2.66	0.55	0.31	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	207.28	212.53	217.76	221.41	224.58	230.32	231.29	238.25	216.36	217.37
- STD. DEV.	0.00	0.00	7.16	6.96	7.71	8.57	8.97	9.17	6.82	9.43	8.98	9.18
WEIGHT - MEAN(gm)	0.00	0.00	122.56	135.71	144.82	151.28	157.35	164.18	172.43	171.50	142.78	144.16
- STD. DEV.	0.00	0.00	16.72	13.68	16.61	20.33	23.46	27.43	30.59	36.54	18.79	19.57

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	98	1373	43	86	0	0
% AT STAGE	0.00	0.00	0.00	6.13	85.81	2.69	5.38	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	20	927	46	993
%	2.01	93.35	4.63	100.00
% SAMPLE WEIGHT	0.48	25.80	0.08	26.37

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	607	993	0	1600
%	37.94	62.06	0.00	100.00
MEAN WEIGHT	141.71	145.66	0.00	144.16
% SAMP. WT.	37.29	62.71	0.00	100.00

TABLE 11 (CONT.) GILLNET ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 173 - YELLOW POINT
SAMPLE NUMBERS: 128,130,147,139,146,140,125,137
SOURCE: ROE FISHERY
GEAR: GILLNET
DATE: MAR 17/87 - MAR 18/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	0	23	266	202	92	39	16	4	1	157	800
% AT AGE	0.00	0.00	3.58	41.37	31.42	14.31	6.07	2.49	0.62	0.16	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	207.13	215.62	218.27	224.30	225.82	232.44	244.25	241.00	216.97	218.32
- STD. DEV.	0.00	0.00	7.50	6.75	6.79	7.30	9.55	8.61	1.89	0.00	8.26	8.65
WEIGHT - MEAN(gm)	0.00	0.00	123.78	139.03	144.83	161.78	161.10	177.94	199.00	213.00	141.45	145.40
- STD. DEV.	0.00	0.00	16.21	13.48	16.25	20.05	24.65	23.67	11.52	0.00	17.01	19.76

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	9	777	11	3	0	0
% AT STAGE	0.00	0.00	0.00	1.13	97.13	1.38	0.38	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	0	460	2	462
%	0.00	99.57	0.43	100.00
% SAMPLE WEIGHT	0.00	29.09	0.01	29.10

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	338	462	0	800
%	42.25	57.75	0.00	100.00
MEAN WEIGHT	143.71	146.63	0.00	145.40
% SAMP. WT.	41.76	58.24	0.00	100.00

TABLE 11 (CONT.) GILLNET ROE FISHERY SAMPLE SUMMARIES BY SECTION

SECTION: 253 - NUCHATLITZ INLET
SAMPLE NUMBERS: 142,301,131,124,134,138,143,122
SOURCE: ROE FISHERY
GEAR: GILLNET
DATE: MAR 12/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	0	10	135	340	30	12	16	5	2	225	775
% AT AGE	0.00	0.00	1.82	24.55	61.82	5.45	2.18	2.91	0.91	0.36	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	214.00	216.24	221.54	222.90	232.83	230.19	235.00	235.50	218.85	220.27
- STD. DEV.	0.00	0.00	4.35	6.69	7.94	6.37	9.92	6.16	6.08	13.44	8.03	8.36
WEIGHT - MEAN(gm)	0.00	0.00	152.70	159.07	173.44	180.40	192.83	190.44	213.80	187.00	163.62	169.04
- STD. DEV.	0.00	0.00	13.06	15.81	19.95	18.05	33.54	30.91	7.46	4.24	18.13	20.90

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	99	650	22	4	0	0
% AT STAGE	0.00	0.00	0.00	12.77	83.87	2.84	0.52	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	5	396	0	401
%	1.25	98.75	0.00	100.00
% SAMPLE WEIGHT	0.24	30.63	0.00	30.87

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	374	401	0	775
%	48.26	51.74	0.00	100.00
MEAN WEIGHT	165.43	172.40	0.00	169.04
% SAMP. WT.	47.23	52.77	0.00	100.00

TABLE 12 PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 2 - PORT LOUIS
SAMPLE NUMBERS: 361
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 13/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	65	32	1	0	0	1	0	0	1	0	100
% AT AGE	0.00	65.00	32.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.42	190.09	210.00	0.00	0.00	234.00	0.00	0.00	255.00	0.00	175.34
- STD. DEV.	0.00	7.82	14.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.71
WEIGHT - MEAN(gm)	0.00	62.78	101.72	136.00	0.00	0.00	192.00	0.00	0.00	285.00	0.00	79.49
- STD. DEV.	0.00	9.58	23.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.99

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	50	47	1	2	0	0
% AT STAGE	0.00	0.00	0.00	50.00	47.00	1.00	2.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	25	31	0	56
%	44.64	55.36	0.00	100.00
% SAMPLE WEIGHT	7.07	14.76	0.00	21.83

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	44	56	0	100
%	44.00	56.00	0.00	100.00
MEAN WEIGHT	69.77	87.13	0.00	79.49
% SAMP. WT.	38.62	61.38	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 3 - RENNELL SOUND
SAMPLE NUMBERS: 292,345,356
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 14/87 - MAR 27/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	71	193	0	1	1	1	15	1	11	6	300
% AT AGE	0.00	24.15	65.65	0.00	0.34	0.34	0.34	5.10	0.34	3.74	0.00	100.00
LENGTH - MEAN(mm)	0.00	164.86	191.51	0.00	215.00	238.00	236.00	249.47	243.00	247.27	189.33	190.65
- STD. DEV.	0.00	8.36	9.10	0.00	0.00	0.00	0.00	7.89	0.00	10.28	16.50	23.58
WEIGHT - MEAN(gm)	0.00	61.44	102.18	0.00	132.00	196.00	213.00	226.73	219.00	224.27	95.50	104.28
- STD. DEV.	0.00	9.86	15.96	0.00	0.00	0.00	0.00	27.86	0.00	39.69	25.98	46.08

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	65	234	1	0	0	0
% AT STAGE	0.00	0.00	0.00	21.67	78.00	0.33	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	17	132	0	149
%	11.41	88.59	0.00	100.00
% SAMPLE WEIGHT	1.71	24.74	0.00	26.45

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	151	149	0	300
%	50.33	49.67	0.00	100.00
MEAN WEIGHT	96.43	112.23	0.00	104.28
% SAMP. WT.	46.55	53.45	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 5 - ENGLEFIELD BAY
SAMPLE NUMBERS: 360
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 16/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	16	48	1	4	4	4	17	3	2	1	100
% AT AGE	0.00	16.16	48.48	1.01	4.04	4.04	4.04	17.17	3.03	2.02	0.00	100.00
LENGTH - MEAN(mm)	0.00	166.50	192.06	205.00	225.50	232.00	233.25	240.47	237.67	240.50	191.00	203.24
- STD. DEV.	0.00	5.87	9.35	0.00	6.56	12.11	10.44	8.27	5.51	0.71	0.00	27.19
WEIGHT - MEAN(gm)	0.00	69.06	106.17	127.00	179.75	203.25	179.75	219.12	188.00	225.50	110.00	134.29
- STD. DEV.	0.00	9.58	19.80	0.00	16.70	32.02	21.65	23.86	17.69	20.51	0.00	57.31

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	49	50	1	0	0	0
% AT STAGE	0.00	0.00	0.00	49.00	50.00	1.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	13	40	0	53
%	24.53	75.47	0.00	100.00
% SAMPLE WEIGHT	3.86	23.65	0.00	27.51

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	47	53	0	100
%	47.00	53.00	0.00	100.00
MEAN WEIGHT	122.60	144.66	0.00	134.29
% SAMP. WT.	42.91	57.09	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 21 - OTHER AREA 2E
SAMPLE NUMBERS: 367,155,171,354,343,172,163,164,156,314, 158,306,359,168,344,350,166,167,159,177, 165,157
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 8/87 - APR 1/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	40	201	98	497	754	74	95	115	132	135	2141
% AT AGE	0.00	1.99	10.02	4.89	24.78	37.59	3.69	4.74	5.73	6.58	0.00	100.00
LENGTH - MEAN(mm)	0.00	169.10	194.45	207.38	215.25	220.43	223.88	228.07	231.82	233.27	212.57	216.60
- STD. DEV.	0.00	7.70	8.26	6.24	7.47	8.11	7.99	9.27	9.48	7.98	19.31	14.81
WEIGHT - MEAN(gm)	0.00	66.63	106.90	132.42	152.36	169.21	176.39	181.05	191.89	202.36	150.87	158.73
- STD. DEV.	0.00	10.64	15.98	16.10	20.23	23.40	24.93	28.93	30.20	25.41	42.44	35.89

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	2	0	369	1714	47	9	0	0
% AT STAGE	0.00	0.09	0.00	17.23	80.06	2.20	0.42	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	122	923	3	1048
%	11.64	88.07	0.29	100.00
% SAMPLE WEIGHT	2.93	25.82	0.02	28.76

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1092	1048	1	2141
%	51.00	48.95	0.05	100.00
MEAN WEIGHT	147.82	170.18	63.00	158.73
% SAMP. WT.	47.50	52.48	0.02	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 23 - CUMSHEWA INLET
SAMPLE NUMBERS: 161,154
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 28/87 - MAR 29/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	1	34	26	22	66	7	9	14	6	15	200
% AT AGE	0.00	0.54	18.38	14.05	11.89	35.68	3.78	4.86	7.57	3.24	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.00	193.74	207.58	215.36	218.85	225.14	227.00	231.43	229.17	217.73	214.15
- STD. DEV.	0.00	0.00	9.28	9.03	11.36	8.71	6.77	6.42	7.57	8.68	10.28	14.70
WEIGHT - MEAN(gm)	0.00	58.00	106.41	133.81	150.82	160.91	164.71	168.33	178.43	186.67	159.33	148.85
- STD. DEV.	0.00	0.00	17.63	20.20	23.68	20.67	16.71	20.72	20.96	28.22	27.27	31.54

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	23	176	1	0	0	0
% AT STAGE	0.00	0.00	0.00	11.50	88.00	0.50	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	4	82	0	86
%	4.65	95.35	0.00	100.00
% SAMPLE WEIGHT	1.09	26.63	0.00	27.71

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	114	86	0	200
%	57.00	43.00	0.00	100.00
MEAN WEIGHT	144.84	154.15	0.00	148.85
% SAMP. WT.	55.47	44.53	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 24 - LASKEEK BAY
SAMPLE NUMBERS: 162
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 27/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	3	20	16	17	19	4	3	1	2	5	90
% AT AGE	0.00	3.53	23.53	18.82	20.00	22.35	4.71	3.53	1.18	2.35	0.00	100.00
LENGTH - MEAN(mm)	0.00	179.67	189.30	204.38	212.47	218.26	224.25	231.67	217.00	224.50	216.40	207.71
- STD. DEV.	0.00	12.58	8.23	6.93	7.32	7.59	3.77	1.53	0.00	2.12	18.98	15.50
WEIGHT - MEAN(gm)	0.00	75.00	98.85	128.88	140.94	157.63	164.25	182.00	137.00	177.50	157.60	134.87
- STD. DEV.	0.00	10.44	14.09	9.39	15.00	21.91	16.54	12.00	0.00	6.36	45.48	31.99

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	19	71	0	0	0	0
% AT STAGE	0.00	0.00	0.00	21.11	78.89	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	1	44	0	45
%	2.22	97.78	0.00	100.00
% SAMPLE WEIGHT	0.47	27.50	0.00	27.97

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	45	45	0	90
%	50.00	50.00	0.00	100.00
MEAN WEIGHT	128.71	141.02	0.00	134.87
% SAMP. WT.	47.72	52.28	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 25 - SKINCUTTLE INLET
SAMPLE NUMBERS: 160
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 26/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	1	8	7	33	33	2	3	4	4	5	100
% AT AGE	0.00	1.05	8.42	7.37	34.74	34.74	2.11	3.16	4.21	4.21	0.00	100.00
LENGTH - MEAN(mm)	0.00	162.00	195.38	209.71	217.45	221.88	226.00	233.67	228.50	236.00	212.80	217.66
- STD. DEV.	0.00	0.00	5.85	8.01	8.49	7.81	7.07	7.64	2.65	8.60	19.15	13.37
WEIGHT - MEAN(gm)	0.00	50.00	106.50	132.86	147.61	169.85	174.50	195.67	167.75	199.50	146.20	154.44
- STD. DEV.	0.00	0.00	12.11	19.09	23.47	25.88	9.19	30.86	29.14	36.70	46.56	34.31

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	4	95	0	1	0	0
% AT STAGE	0.00	0.00	0.00	4.00	95.00	0.00	1.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	0	44	1	45
%	0.00	97.78	2.22	100.00
% SAMPLE WEIGHT	0.00	28.03	0.04	28.07

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	55	45	0	100
%	55.00	45.00	0.00	100.00
MEAN WEIGHT	146.55	164.09	0.00	154.44
% SAMP. WT.	52.19	47.81	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 33 - PORT SIMPSON
SAMPLE NUMBERS: 286,322,277,229,279
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 16/87 - MAR 30/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	14	185	64	24	132	37	14	7	7	16	500
% AT AGE	0.00	2.89	38.22	13.22	4.96	27.27	7.64	2.89	1.45	1.45	0.00	100.00
LENGTH - MEAN(mm)	0.00	146.57	181.15	196.95	204.79	210.56	214.22	225.86	226.00	223.43	188.94	196.27
- STD. DEV.	0.00	11.17	11.65	8.00	9.93	8.88	7.54	8.48	14.47	15.79	20.86	19.89
WEIGHT - MEAN(gm)	0.00	38.57	81.71	107.39	124.04	136.32	145.16	172.93	173.29	152.57	97.38	110.26
- STD. DEV.	0.00	10.12	18.18	15.67	17.63	23.38	21.74	26.18	36.05	30.42	31.85	36.68

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	5	5	0	157	272	26	35	0	0
% AT STAGE	1.00	1.00	0.00	31.40	54.40	5.20	7.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	96	134	9	239
%	40.17	56.07	3.77	100.00
% SAMPLE WEIGHT	9.52	14.80	0.05	24.37

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	248	239	13	500
%	49.60	47.80	2.60	100.00
MEAN WEIGHT	109.41	115.03	38.92	110.26
% SAMP. WT.	49.21	49.87	0.92	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 42 - BIG BAY
SAMPLE NUMBERS: 298,341,231,223,291,225,280,230,287,313, 226
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 20/87 - MAR 31/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	13	390	106	75	360	65	33	22	8	28	1100
% AT AGE	0.00	1.21	36.38	9.89	7.00	33.58	6.06	3.08	2.05	0.75	0.00	100.00
LENGTH - MEAN(mm)	0.00	166.15	179.71	196.40	205.84	211.76	217.66	219.21	222.00	221.13	193.18	198.35
- STD. DEV.	0.00	15.39	9.87	9.47	7.77	7.92	9.30	7.94	7.18	3.36	19.08	18.35
WEIGHT - MEAN(gm)	0.00	63.62	80.48	107.67	126.59	140.59	151.03	157.67	166.50	162.25	100.14	115.01
- STD. DEV.	0.00	17.89	14.71	17.40	16.91	21.40	23.94	20.34	22.66	20.74	32.04	35.36

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	2	171	860	19	48	0	0
% AT STAGE	0.00	0.00	0.18	15.55	78.18	1.73	4.36	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	51	462	9	522
%	9.77	88.51	1.72	100.00
% SAMPLE WEIGHT	2.12	24.73	0.03	26.88

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	577	522	1	1100
%	52.45	47.45	0.09	100.00
MEAN WEIGHT	108.65	122.15	59.00	115.01
% SAMP. WT.	49.55	50.40	0.05	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 43 - MALACCA PASSAGE
SAMPLE NUMBERS: 288,237
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 28/87 - MAR 29/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	2	80	30	9	58	5	7	7	0	2	200
% AT AGE	0.00	1.01	40.40	15.15	4.55	29.29	2.53	3.54	3.54	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	175.50	184.21	195.23	215.22	212.43	220.20	217.29	219.29	0.00	202.50	198.82
- STD. DEV.	0.00	2.12	8.52	8.46	8.06	8.09	4.32	6.26	6.80	0.00	9.19	16.18
WEIGHT - MEAN(gm)	0.00	69.50	85.81	105.60	140.44	144.29	162.20	153.14	163.29	0.00	116.00	115.32
- STD. DEV.	0.00	7.78	13.51	17.48	23.15	25.24	28.16	22.84	18.14	0.00	16.97	34.78

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	18	173	1	8	0	0
% AT STAGE	0.00	0.00	0.00	9.00	86.50	0.50	4.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	3	89	2	94
%	3.19	94.68	2.13	100.00
% SAMPLE WEIGHT	0.52	26.78	0.02	27.31

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	105	94	1	200
%	52.50	47.00	0.50	100.00
MEAN WEIGHT	109.97	121.45	100.00	115.32
% SAMP. WT.	50.07	49.50	0.43	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 52 - KITKATLA CHANNEL
SAMPLE NUMBERS: 309,235,364,302,222,228,329,224,307,299, 232,234,282,316,285,236,308,233,227,319, 324
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 18/87 - APR 3/87

SPECIMENS AT EACH AGE:

	AGE 1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	8	823	191	136	569	116	68	72	31	85	2099
% AT AGE	0.00	0.40	40.86	9.48	6.75	28.25	5.76	3.38	3.57	1.54	0.00	100.00
LENGTH - MEAN(mm)	0.00	161.63	182.93	195.02	206.74	211.53	216.25	220.03	224.06	226.03	197.95	198.94
- STD. DEV.	0.00	11.10	8.43	8.46	9.37	8.69	9.28	9.73	10.65	8.84	19.00	17.48
WEIGHT - MEAN(gm)	0.00	56.13	85.18	106.69	129.32	144.77	154.72	159.78	173.54	180.03	116.91	118.02
- STD. DEV.	0.00	15.88	13.40	16.45	22.54	21.86	24.42	26.07	29.67	21.10	38.04	36.77

HJORT MATURITY STAGES:

	MATURITY STAGE 1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	1	246	1805	46	1	0	0
% AT STAGE	0.00	0.00	0.05	11.72	85.99	2.19	0.05	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	58	949	0	1007
%	5.76	94.24	0.00	100.00
% SAMPLE WEIGHT	1.29	26.27	0.00	27.56

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1092	1007	0	2099
%	52.02	47.98	0.00	100.00
MEAN WEIGHT	112.41	124.10	0.00	118.02
% SAMP. WT.	49.55	50.45	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 67 - KITASU BAY
SAMPLE NUMBERS: 209,195,189,199,215,204,213,193
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 10/87 - MAR 29/87

SPECIMENS AT EACH AGE:

	AGE 1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	118	157	85	189	62	36	35	46	36	36	800
% AT AGE	0.00	15.45	20.55	11.13	24.74	8.12	4.71	4.58	6.02	4.71	0.00	100.00
LENGTH - MEAN(mm)	0.00	146.47	186.61	199.93	208.24	213.73	218.69	216.51	224.13	226.17	199.64	196.59
- STD. DEV.	0.00	12.67	7.80	7.80	7.65	10.93	9.65	10.88	10.28	13.49	25.87	26.21
WEIGHT - MEAN(gm)	0.00	38.11	95.03	119.55	136.61	147.76	157.44	154.34	174.83	179.72	120.47	118.10
- STD. DEV.	0.00	15.28	13.67	17.47	17.92	23.51	23.55	29.16	23.24	37.29	46.83	46.38

HJORT MATURITY STAGES:

	MATURITY STAGE 1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	39	56	16	322	359	0	6	2	0
% AT STAGE	4.88	7.00	2.00	40.25	44.88	0.00	0.75	0.25	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	235	162	3	400
%	58.75	40.50	0.75	100.00
% SAMPLE WEIGHT	10.73	12.47	0.00	23.20

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	363	400	37	800
%	45.38	50.00	4.63	100.00
MEAN WEIGHT	117.00	127.28	29.62	118.10
% SAMP. WT.	44.95	53.89	1.16	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 72 - POWELL ANCHORAGE
SAMPLE NUMBERS: 295,335,206,342,211,220,332,339,197,221
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 8/87 - MAR 27/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	113	132	115	311	50	42	51	46	55	48	963
% AT AGE	0.00	12.35	14.43	12.57	33.99	5.46	4.59	5.57	5.03	6.01	0.00	100.00
LENGTH - MEAN(mm)	0.00	144.81	187.04	203.43	215.04	223.36	224.86	229.37	231.76	236.60	200.63	204.50
- STD. DEV.	0.00	13.34	12.75	10.86	11.13	9.38	9.79	10.60	9.12	7.95	28.58	28.63
WEIGHT - MEAN(gm)	0.00	36.41	96.35	130.17	160.00	185.80	191.83	201.80	209.39	218.80	130.90	142.42
- STD. DEV.	0.00	15.19	23.47	27.47	29.81	33.77	33.99	35.07	33.44	36.08	60.35	60.23

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	35	42	3	345	517	7	3	0	11
% AT STAGE	3.63	4.36	0.31	35.83	53.69	0.73	0.31	0.00	1.14

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	165	307	2	474
%	34.81	64.77	0.42	100.00
% SAMPLE WEIGHT	8.42	20.25	0.00	28.67

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	436	474	53	963
%	45.28	49.22	5.50	100.00
MEAN WEIGHT	138.17	158.99	29.19	142.42
% SAMP. WT.	43.92	54.95	1.13	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 74 - THOMPSON BAY
SAMPLE NUMBERS: 293,203,216,330,219,212,205,218,321,210, 217,289,283,196
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 2/87 - APR 2/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	77	318	184	383	64	64	83	67	93	59	1392
% AT AGE	0.00	5.78	23.86	13.80	28.73	4.80	4.80	6.23	5.03	6.98	0.00	100.00
LENGTH - MEAN(mm)	0.00	163.18	186.24	201.51	214.09	220.34	223.97	226.11	230.90	234.59	208.64	206.65
- STD. DEV.	0.00	12.44	11.67	10.74	10.17	10.87	10.25	11.59	8.96	7.67	20.28	21.68
WEIGHT - MEAN(gm)	0.00	60.60	93.87	128.10	157.40	179.23	188.66	189.12	210.01	215.71	146.51	143.96
- STD. DEV.	0.00	17.73	22.08	26.59	28.47	30.89	33.71	37.33	28.18	28.41	47.68	51.70

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	8	4	12	663	698	4	3	0	0
% AT STAGE	0.57	0.29	0.86	47.63	50.14	0.29	0.22	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	398	340	1	739
%	53.86	46.01	0.14	100.00
% SAMPLE WEIGHT	12.45	13.90	0.00	26.35

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	645	739	8	1392
%	46.34	53.09	0.57	100.00
MEAN WEIGHT	136.50	151.68	32.38	143.96
% SAMP. WT.	43.94	55.93	0.13	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 75 - MCNAUGHTON GROUP
SAMPLE NUMBERS: 208,190
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 17/87 - MAR 18/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	34	80	32	27	4	4	7	1	1	10	200
% AT AGE	0.00	17.89	42.11	16.84	14.21	2.11	2.11	3.68	0.53	0.53	0.00	100.00
LENGTH - MEAN(mm)	0.00	167.85	184.27	195.88	206.70	201.50	219.25	223.29	213.00	216.00	196.50	189.69
- STD. DEV.	0.00	8.50	8.58	10.53	11.53	11.70	14.41	8.77	0.00	0.00	12.94	17.27
WEIGHT - MEAN(gm)	0.00	68.56	90.71	113.03	145.63	125.25	192.50	170.86	166.00	164.00	113.40	105.34
- STD. DEV.	0.00	11.54	16.17	26.79	35.48	29.88	57.40	26.90	0.00	0.00	27.26	37.66

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	1	52	146	0	1	0	0
% AT STAGE	0.00	0.00	0.50	26.00	73.00	0.00	0.50	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	35	63	1	99
%	35.35	63.64	1.01	100.00
% SAMPLE WEIGHT	6.99	18.23	0.00	25.22

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	101	99	0	200
%	50.50	49.50	0.00	100.00
MEAN WEIGHT	99.59	111.20	0.00	105.34
% SAMP. WT.	47.75	52.25	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 76 - KILDIDT SOUND
SAMPLE NUMBERS: 363,191,198
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 5/87 - MAR 18/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	4	105	73	80	5	2	6	4	5	16	300
% AT AGE	0.00	1.41	36.97	25.70	28.17	1.76	0.70	2.11	1.41	1.76	0.00	100.00
LENGTH - MEAN(mm)	0.00	156.25	182.48	194.77	204.93	212.60	212.50	216.67	218.75	220.00	197.13	194.38
- STD. DEV.	0.00	11.09	10.55	7.84	9.17	17.92	6.36	5.05	2.22	8.34	23.11	15.67
WEIGHT - MEAN(gm)	0.00	51.50	87.52	109.70	134.02	156.40	135.00	159.83	166.25	168.00	120.06	111.88
- STD. DEV.	0.00	13.18	16.03	16.14	21.70	43.51	22.63	9.06	10.47	30.01	47.91	31.67

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	0	1	165	132	0	1	0	0
% AT STAGE	0.33	0.00	0.33	55.00	44.00	0.00	0.33	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	85	53	0	138
%	61.59	38.41	0.00	100.00
% SAMPLE WEIGHT	13.72	10.75	0.00	24.47

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	161	138	1	300
%	53.67	46.00	0.33	100.00
MEAN WEIGHT	108.11	116.86	32.00	111.88
% SAMP. WT.	51.86	48.05	0.10	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 77 - EAST HIGGINS PASS
SAMPLE NUMBERS: 333,317,201,296,207
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 8/87 - MAR 27/87

SPECIMENS AT EACH AGE:

	AGE 1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	11	84	73	212	31	20	19	16	20	14	500
% AT AGE	0.00	2.26	17.28	15.02	43.62	6.38	4.12	3.91	3.29	4.12	0.00	100.00
LENGTH - MEAN(mm)	0.00	159.45	185.00	199.55	207.86	214.39	215.95	220.42	222.00	224.60	199.00	203.82
- STD. DEV.	0.00	9.14	10.45	8.41	8.54	8.28	7.85	7.48	8.07	10.46	21.27	15.87
WEIGHT - MEAN(gm)	0.00	57.91	90.98	119.40	135.69	148.84	152.05	170.21	168.25	173.75	126.00	129.16
- STD. DEV.	0.00	11.14	17.03	17.21	19.42	18.08	16.29	20.57	27.83	29.56	47.86	32.28

HJORT MATURITY STAGES:

	MATURITY STAGE 1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	2	188	303	7	0	0	0
% AT STAGE	0.00	0.00	0.40	37.60	60.60	1.40	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	95	168	0	263
%	36.12	63.88	0.00	100.00
% SAMPLE WEIGHT	8.42	17.75	0.00	26.17

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	237	263	0	500
%	47.40	52.60	0.00	100.00
MEAN WEIGHT	122.30	135.34	0.00	129.16
% SAMP. WT.	44.88	55.12	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 78 - SPILLER CHANNEL
SAMPLE NUMBERS: 202
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 30/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	74	11	3	1	6	1	0	1	0	3	100
% AT AGE	0.00	76.29	11.34	3.09	1.03	6.19	1.03	0.00	1.03	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	153.00	166.00	171.33	179.00	183.17	229.00	0.00	268.00	0.00	153.33	158.97
- STD. DEV.	0.00	7.27	8.64	11.02	0.00	21.43	0.00	0.00	0.00	0.00	10.21	17.92
WEIGHT - MEAN(gm)	0.00	43.66	58.27	72.33	70.00	81.17	171.00	0.00	206.00	0.00	46.67	51.63
- STD. DEV.	0.00	6.60	7.98	13.32	0.00	29.63	0.00	0.00	0.00	0.00	11.02	24.41

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	16	54	6	24	0	0	0	0	0
% AT STAGE	16.00	54.00	6.00	24.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	20	0	0	20
%	100.00	0.00	0.00	100.00
% SAMPLE WEIGHT	10.06	0.00	0.00	10.06

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	14	20	66	100
%	14.00	20.00	66.00	100.00
MEAN WEIGHT	60.50	70.05	44.17	51.63
% SAMP. WT.	16.41	27.14	56.46	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 85 - KWAKSHUA CHANNEL
SAMPLE NUMBERS: 214,194,200,192
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 4/87 - APR 3/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	65	130	73	82	8	5	9	4	2	17	395
% AT AGE	0.00	17.20	34.39	19.31	21.69	2.12	1.32	2.38	1.06	0.53	0.00	100.00
LENGTH - MEAN(mm)	0.00	154.31	176.88	192.67	199.06	209.50	208.80	215.89	215.25	217.50	172.12	183.03
- STD. DEV.	0.00	13.32	11.96	8.35	9.74	13.02	8.98	10.68	4.11	6.36	25.43	20.71
WEIGHT - MEAN(gm)	0.00	48.85	76.62	101.41	114.74	134.38	124.60	160.00	146.75	151.00	76.59	89.31
- STD. DEV.	0.00	15.36	16.79	18.11	20.75	25.35	24.73	30.15	11.87	22.63	34.49	32.89

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	14	4	169	125	0	81	2	0
% AT STAGE	0.00	3.54	1.01	42.78	31.65	0.00	20.51	0.51	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	110	19	32	161
%	68.32	11.80	19.88	100.00
% SAMPLE WEIGHT	16.36	3.61	0.42	20.39

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	222	161	12	395
%	56.20	40.76	3.04	100.00
MEAN WEIGHT	85.36	99.07	31.42	89.31
% SAMP. WT.	53.72	45.21	1.07	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 135 - HERIOT BAY
SAMPLE NUMBERS: 73, 75,315, 71, 74
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 10/87 - MAR 18/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	12	233	135	65	18	5	0	0	0	32	500
% AT AGE	0.00	2.56	49.79	28.85	13.89	3.85	1.07	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	157.92	183.30	188.72	198.85	203.72	212.00	0.00	0.00	0.00	188.63	187.54
- STD. DEV.	0.00	9.80	10.09	10.35	12.65	9.31	4.30	0.00	0.00	0.00	18.73	13.63
WEIGHT - MEAN(gm)	0.00	52.08	79.51	91.36	105.94	118.56	130.20	0.00	0.00	0.00	91.69	88.18
- STD. DEV.	0.00	13.28	14.95	18.14	25.99	25.47	18.97	0.00	0.00	0.00	32.13	23.11

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	39	400	29	32	0	0
% AT STAGE	0.00	0.00	0.00	7.80	80.00	5.80	6.40	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	6	246	14	266
%	2.26	92.48	5.26	100.00
% SAMPLE WEIGHT	0.45	21.19	0.07	21.71

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	234	266	0	500
%	46.80	53.20	0.00	100.00
MEAN WEIGHT	83.75	92.08	0.00	88.18
% SAMP. WT.	44.45	55.55	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 136 - OTHER AREA 13 GULF
SAMPLE NUMBERS: 320, 72
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 11/87 - MAR 12/87

SPECIMENS AT EACH AGE:

	AGE 1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	19	60	45	14	1	2	0	1	0	58	200
% AT AGE	0.00	13.38	42.25	31.69	9.86	0.70	1.41	0.00	0.70	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	150.47	177.20	192.16	201.07	191.00	209.50	0.00	216.00	0.00	194.40	185.27
- STD. DEV.	0.00	17.35	11.19	8.61	11.66	0.00	9.19	0.00	0.00	0.00	14.53	18.68
WEIGHT - MEAN(gm)	0.00	43.68	74.88	98.00	115.50	92.00	133.00	0.00	131.00	0.00	103.83	89.31
- STD. DEV.	0.00	19.20	17.88	16.07	25.61	0.00	4.24	0.00	0.00	0.00	29.81	29.98

HJORT MATURITY STAGES:

	MATURITY STAGE 1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	6	8	1	45	135	2	3	0	0
% AT STAGE	3.00	4.00	0.50	22.50	67.50	1.00	1.50	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	25	63	2	90
%	27.78	70.00	2.22	100.00
% SAMPLE WEIGHT	3.56	18.30	0.06	21.92

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	100	90	10	200
%	50.00	45.00	5.00	100.00
MEAN WEIGHT	92.68	91.54	35.40	89.31
% SAMP. WT.	51.89	46.13	1.98	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 142 - BAYNES SOUND
SAMPLE NUMBERS: 32, 64,327,353,334, 42, 50, 78, 34, 19, 7,325, 53, 59, 63,338,318, 47, 58,355, 62, 11
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 23/87 - MAR 16/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	220	590	815	294	78	26	7	3	1	166	2200
% AT AGE	0.00	10.82	29.01	40.07	14.45	3.83	1.28	0.34	0.15	0.05	0.00	100.00
LENGTH - MEAN(mm)	0.00	162.62	189.44	200.11	207.47	214.19	219.65	229.71	234.00	223.00	194.56	194.95
- STD. DEV.	0.00	17.55	10.03	11.19	11.34	12.73	10.35	9.30	6.00	0.00	16.06	17.82
WEIGHT - MEAN(gm)	0.00	53.62	89.10	109.98	127.62	145.38	150.50	179.71	186.00	160.00	98.19	102.29
- STD. DEV.	0.00	18.33	17.27	22.85	25.10	30.77	29.86	34.02	13.11	0.00	30.42	31.98

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	38	37	13	998	707	25	368	14	0
% AT STAGE	1.73	1.68	0.59	45.36	32.14	1.14	16.73	0.64	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	582	356	161	1099
%	52.96	32.39	14.65	100.00
% SAMPLE WEIGHT	11.48	8.89	0.22	20.58

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1039	1099	62	2200
%	47.23	49.95	2.82	100.00
MEAN WEIGHT	99.40	108.91	33.42	102.29
% SAMP. WT.	45.89	53.19	0.92	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 143 - QUALICUM
SAMPLE NUMBERS: 30,362,357,348, 49
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 28/87 - MAR 19/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	61	143	171	64	16	1	3	0	0	41	500
% AT AGE	0.00	13.29	31.15	37.25	13.94	3.49	0.22	0.65	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	174.54	190.47	201.61	208.39	220.69	230.00	236.33	0.00	0.00	185.88	195.58
- STD. DEV.	0.00	7.50	9.72	10.55	11.89	11.95	0.00	1.53	0.00	0.00	12.14	15.52
WEIGHT - MEAN(gm)	0.00	64.52	84.89	104.78	117.86	138.44	152.00	174.33	0.00	0.00	81.68	95.55
- STD. DEV.	0.00	10.54	16.09	21.99	25.33	29.26	0.00	22.81	0.00	0.00	21.22	27.54

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	0	144	103	6	245	1	0
% AT STAGE	0.00	0.20	0.00	28.80	20.60	1.20	49.00	0.20	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	56	74	112	242
%	23.14	30.58	46.28	100.00
% SAMPLE WEIGHT	5.06	8.57	0.73	14.36

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	258	242	0	500
%	51.60	48.40	0.00	100.00
MEAN WEIGHT	91.83	99.52	0.00	95.55
% SAMP. WT.	49.59	50.41	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 152 - LUND
SAMPLE NUMBERS: 4, 76,366, 9, 1, 77, 15,331,351,346, 3, 31,352, 48, 52, 20, 65, 2, 39, 12, 66,340
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 24/87 - MAR 18/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	1	62	625	774	425	108	32	9	4	3	155	2198
% AT AGE	0.05	3.03	30.59	37.89	20.80	5.29	1.57	0.44	0.20	0.15	0.00	100.00
LENGTH - MEAN(mm)	108.00	154.66	186.07	193.85	202.20	207.44	213.00	217.56	212.75	223.00	198.66	193.56
- STD. DEV.	0.00	13.38	10.10	9.48	9.56	8.99	8.75	8.66	8.66	16.09	17.08	14.38
WEIGHT - MEAN(gm)	14.00	48.21	85.00	100.11	117.86	130.59	146.03	148.44	144.25	166.33	105.55	100.66
- STD. DEV.	0.00	12.04	17.02	18.56	22.45	22.33	24.97	21.90	15.59	27.79	23.89	26.14

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	4	3	18	1274	675	17	206	0	1
% AT STAGE	0.18	0.14	0.82	57.96	30.71	0.77	9.37	0.00	0.05

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	661	394	85	1140
%	57.98	34.56	7.46	100.00
% SAMPLE WEIGHT	12.35	8.67	0.11	21.13

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1050	1140	8	2198
%	47.77	51.87	0.36	100.00
MEAN WEIGHT	96.08	105.28	43.25	100.66
% SAMP. WT.	45.60	54.24	0.16	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 172 - NANOOSE BAY
SAMPLE NUMBERS: 36, 33, 35, 68, 60
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 25/87 - MAR 14/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	79	113	179	55	9	5	2	1	0	57	500
% AT AGE	0.00	17.83	25.51	40.41	12.42	2.03	1.13	0.45	0.23	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	175.00	192.94	203.75	212.85	217.89	223.40	224.00	230.00	0.00	192.28	197.04
- STD. DEV.	0.00	8.41	10.44	10.60	9.63	13.44	6.03	4.24	0.00	0.00	18.74	16.59
WEIGHT - MEAN(gm)	0.00	69.62	91.52	108.05	128.55	145.89	144.20	150.00	145.00	0.00	95.72	100.38
- STD. DEV.	0.00	10.67	18.08	21.71	20.82	31.72	15.61	52.33	0.00	0.00	30.86	28.03

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	6	139	199	5	150	0	0
% AT STAGE	0.00	0.20	1.20	27.80	39.80	1.00	30.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	83	86	81	250
%	33.20	34.40	32.40	100.00
% SAMPLE WEIGHT	6.08	9.54	0.63	16.25

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	250	250	0	500
%	50.00	50.00	0.00	100.00
MEAN WEIGHT	98.68	102.07	0.00	100.38
% SAMP. WT.	49.16	50.84	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 173 - YELLOW POINT
SAMPLE NUMBERS: 41, 79, 18, 8, 61, 51, 43, 40, 38,326, 46,323, 37
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 23/87 - MAR 15/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	376	409	287	64	13	3	2	0	1	145	1300
% AT AGE	0.00	32.55	35.41	24.85	5.54	1.13	0.26	0.17	0.00	0.09	0.00	100.00
LENGTH - MEAN(mm)	0.00	170.19	185.94	195.11	210.30	216.00	235.33	242.00	0.00	249.00	183.37	184.87
- STD. DEV.	0.00	10.95	13.15	17.10	13.88	13.01	3.51	1.41	0.00	0.00	15.98	18.29
WEIGHT - MEAN(gm)	0.00	62.20	85.31	101.79	128.91	146.69	195.00	199.50	0.00	216.00	83.01	85.30
- STD. DEV.	0.00	11.84	18.29	25.21	28.84	29.63	2.65	7.78	0.00	0.00	24.67	28.44

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	14	19	765	424	18	56	0	3
% AT STAGE	0.08	1.08	1.46	58.85	32.62	1.38	4.31	0.00	0.23

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	412	209	27	648
%	63.58	32.25	4.17	100.00
% SAMPLE WEIGHT	12.24	7.74	0.08	20.06

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	647	648	4	1299
%	49.81	49.88	0.31	100.00
MEAN WEIGHT	81.29	89.64	43.50	85.34
% SAMP. WT.	47.44	52.40	0.16	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 181 - OTHER AREA 18
SAMPLE NUMBERS: 16
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 1/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	11	33	37	9	1	2	1	0	0	6	100
% AT AGE	0.00	11.70	35.11	39.36	9.57	1.06	2.13	1.06	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	174.82	193.58	205.27	210.67	220.00	223.50	235.00	0.00	0.00	191.67	198.54
- STD. DEV.	0.00	9.43	7.59	11.51	5.81	0.00	10.61	0.00	0.00	0.00	8.14	14.75
WEIGHT - MEAN(gm)	0.00	64.82	96.03	119.16	135.44	167.00	182.00	194.00	0.00	0.00	92.83	107.92
- STD. DEV.	0.00	9.18	15.64	23.61	16.53	0.00	16.97	0.00	0.00	0.00	14.63	30.50

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	97	2	0	1	0	0
% AT STAGE	0.00	0.00	0.00	97.00	2.00	0.00	1.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	44	1	0	45
%	97.78	2.22	0.00	100.00
% SAMPLE WEIGHT	20.34	0.26	0.00	20.60

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	55	45	0	100
%	55.00	45.00	0.00	100.00
MEAN WEIGHT	97.98	120.07	0.00	107.92
% SAMP. WT.	49.94	50.06	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 182 - PLUMPER SOUND
SAMPLE NUMBERS: 57
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 27/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	11	32	42	7	3	2	0	0	0	3	100
% AT AGE	0.00	11.34	32.99	43.30	7.22	3.09	2.06	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	175.45	191.56	205.64	214.57	222.00	221.00	0.00	0.00	0.00	197.33	198.99
- STD. DEV.	0.00	6.93	11.04	8.83	7.98	1.73	7.07	0.00	0.00	0.00	7.02	14.90
WEIGHT - MEAN(gm)	0.00	72.27	95.19	123.81	137.14	157.67	154.50	0.00	0.00	0.00	106.00	111.01
- STD. DEV.	0.00	11.03	22.22	20.82	19.52	8.96	10.61	0.00	0.00	0.00	19.29	29.16

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	2	96	2	0	0	0	0
% AT STAGE	0.00	0.00	2.00	96.00	2.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	48	1	0	49
%	97.96	2.04	0.00	100.00
% SAMPLE WEIGHT	18.98	0.42	0.00	19.40

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	51	49	0	100
%	51.00	49.00	0.00	100.00
MEAN WEIGHT	101.12	121.31	0.00	111.01
% SAMP. WT.	46.46	53.54	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 232 - MACOAH PASS
SAMPLE NUMBERS: 328, 5,117, 6,112,349, 24, 10, 26, 17, 25, 56, 23, 14,347, 83, 13, 67,119, 44, 54, 69, 80,121, 88
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 23/87 - MAR 19/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	406	359	834	428	168	63	36	24	11	171	2500
% AT AGE	0.00	17.43	15.41	35.81	18.38	7.21	2.71	1.55	1.03	0.47	0.00	100.00
LENGTH - MEAN(mm)	0.00	172.04	194.20	209.70	219.98	227.56	233.56	237.08	239.96	239.91	199.25	205.02
- STD. DEV.	0.00	8.00	8.68	9.13	8.35	8.63	9.05	6.78	7.70	9.20	21.13	20.68
WEIGHT - MEAN(gm)	0.00	69.96	102.82	135.72	160.49	179.15	199.62	201.64	204.96	201.18	117.88	129.77
- STD. DEV.	0.00	10.74	16.86	22.26	21.98	26.05	25.29	20.62	23.79	30.75	45.07	42.76

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	2	1	1	1277	1207	9	3	0	0
% AT STAGE	0.08	0.04	0.04	51.08	48.28	0.36	0.12	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	567	677	0	1244
%	45.58	54.42	0.00	100.00
% SAMPLE WEIGHT	11.94	15.59	0.00	27.53

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1253	1244	3	2500
%	50.12	49.76	0.12	100.00
MEAN WEIGHT	122.72	136.96	94.00	129.77
% SAMP. WT.	47.40	52.52	0.09	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 233 - IMPERIAL EAGLE CHANNEL
SAMPLE NUMBERS: 55, 29
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 2/87 - MAR 6/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	15	44	83	37	8	4	0	0	0	9	200
% AT AGE	0.00	7.85	23.04	43.46	19.37	4.19	2.09	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	176.07	193.75	207.31	217.68	218.00	226.75	0.00	0.00	0.00	205.22	204.63
- STD. DEV.	0.00	5.44	7.15	8.22	8.01	8.91	6.29	0.00	0.00	0.00	11.49	14.16
WEIGHT - MEAN(gm)	0.00	74.73	105.59	133.95	159.03	162.00	185.25	0.00	0.00	0.00	125.22	129.66
- STD. DEV.	0.00	5.16	12.60	19.07	19.36	20.38	28.03	0.00	0.00	0.00	30.18	30.75

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	1	145	54	0	0	0	0
% AT STAGE	0.00	0.00	0.50	72.50	27.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	57	23	0	80
%	71.25	28.75	0.00	100.00
% SAMPLE WEIGHT	18.44	9.25	0.00	27.69

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	120	80	0	200
%	60.00	40.00	0.00	100.00
MEAN WEIGHT	121.93	141.27	0.00	129.66
% SAMP. WT.	56.42	43.58	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 243 - SYDNEY INLET
SAMPLE NUMBERS: 22, 27
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 28/87 - MAR 1/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	29	20	60	51	20	5	3	3	1	8	200
% AT AGE	0.00	15.10	10.42	31.25	26.56	10.42	2.60	1.56	1.56	0.52	0.00	100.00
LENGTH - MEAN(mm)	0.00	171.28	201.55	210.73	221.29	230.95	236.20	236.33	231.33	236.00	200.38	209.85
- STD. DEV.	0.00	11.24	8.49	9.21	9.65	7.44	9.20	5.51	10.02	0.00	18.25	20.92
WEIGHT - MEAN(gm)	0.00	68.45	112.70	141.55	170.90	193.10	208.60	194.67	180.67	195.00	120.63	143.20
- STD. DEV.	0.00	14.99	15.54	23.58	25.02	22.16	27.27	15.63	35.50	0.00	39.06	45.45

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	2	189	9	0	0	0	0
% AT STAGE	0.00	0.00	1.00	94.50	4.50	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	91	4	0	95
%	95.79	4.21	0.00	100.00
% SAMPLE WEIGHT	26.36	1.20	0.00	27.55

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	105	95	0	200
%	52.50	47.50	0.00	100.00
MEAN WEIGHT	139.06	147.77	0.00	143.20
% SAMP. WT.	50.98	49.02	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 244 - WHITEPINE COVE
SAMPLE NUMBERS: 28, 21
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 28/87 - MAR 2/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	5	19	41	48	33	19	12	5	5	13	200
% AT AGE	0.00	2.67	10.16	21.93	25.67	17.65	10.16	6.42	2.67	2.67	0.00	100.00
LENGTH - MEAN(mm)	0.00	176.00	195.21	211.66	218.71	229.18	235.68	236.00	239.60	247.20	213.31	219.23
- STD. DEV.	0.00	5.74	7.55	8.34	7.26	6.53	10.27	4.11	7.30	5.85	20.17	16.77
WEIGHT - MEAN(gm)	0.00	67.80	100.53	138.78	155.17	186.58	197.00	203.33	214.80	239.00	147.08	159.54
- STD. DEV.	0.00	5.40	15.40	19.10	19.32	23.10	22.84	19.50	22.35	10.91	50.24	41.90

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	171	29	0	0	0	0
% AT STAGE	0.00	0.00	0.00	85.50	14.50	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	82	6	0	88
%	93.18	6.82	0.00	100.00
% SAMPLE WEIGHT	25.14	2.10	0.00	27.24

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	112	88	0	200
%	56.00	44.00	0.00	100.00
MEAN WEIGHT	156.63	163.25	0.00	159.54
% SAMP. WT.	54.98	45.02	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 252 - WEST NOOTKA
SAMPLE NUMBERS: 312
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 1/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	36	31	17	10	0	0	1	0	0	5	100
% AT AGE	0.00	37.89	32.63	17.89	10.53	0.00	0.00	1.05	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	170.44	189.03	204.12	214.60	0.00	0.00	235.00	0.00	0.00	180.80	187.51
- STD. DEV.	0.00	7.37	8.48	9.62	4.50	0.00	0.00	0.00	0.00	0.00	18.24	18.01
WEIGHT - MEAN(gm)	0.00	67.44	93.32	125.59	147.20	0.00	0.00	154.00	0.00	0.00	100.80	95.86
- STD. DEV.	0.00	9.41	12.79	24.48	14.46	0.00	0.00	0.00	0.00	0.00	54.82	32.67

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	74	25	1	0	0	0
% AT STAGE	0.00	0.00	0.00	74.00	25.00	1.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	33	12	0	45
%	73.33	26.67	0.00	100.00
% SAMPLE WEIGHT	17.61	6.86	0.00	24.48

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	55	45	0	100
%	55.00	45.00	0.00	100.00
MEAN WEIGHT	93.76	98.42	0.00	95.86
% SAMP. WT.	53.80	46.20	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 253 - NUCHATLITZ INLET
SAMPLE NUMBERS: 300, 81,145, 89, 90, 91, 87
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 24/87 - MAR 8/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	111	125	160	233	17	3	1	3	0	47	700
% AT AGE	0.00	17.00	19.14	24.50	35.68	2.60	0.46	0.15	0.46	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	167.04	194.10	210.91	218.80	224.18	230.67	221.00	233.33	0.00	198.32	203.25
- STD. DEV.	0.00	10.71	10.19	8.26	7.99	13.01	5.13	0.00	1.53	0.00	23.94	21.26
WEIGHT - MEAN(gm)	0.00	64.35	104.68	145.75	173.97	193.65	203.33	208.00	222.67	0.00	122.49	135.17
- STD. DEV.	0.00	13.12	20.78	25.04	25.37	42.76	24.11	0.00	10.50	0.00	52.29	48.25

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	0	175	512	9	1	0	2
% AT STAGE	0.00	0.14	0.00	25.00	73.14	1.29	0.14	0.00	0.29

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	86	283	1	370
%	23.24	76.49	0.27	100.00
% SAMPLE WEIGHT	3.54	24.69	0.00	28.23

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	328	370	2	700
%	46.86	52.86	0.29	100.00
MEAN WEIGHT	131.23	138.96	80.00	135.17
% SAMP. WT.	45.49	54.34	0.17	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 272 - BROOKS BAY
SAMPLE NUMBERS: 85
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 15/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	0	9	15	58	3	0	3	1	4	7	100
% AT AGE	0.00	0.00	9.68	16.13	62.37	3.23	0.00	3.23	1.08	4.30	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	204.00	215.40	219.02	224.00	0.00	234.67	235.00	231.25	214.14	218.05
- STD. DEV.	0.00	0.00	7.73	7.09	7.29	11.53	0.00	2.52	0.00	3.40	4.52	9.33
WEIGHT - MEAN(gm)	0.00	0.00	118.22	160.27	168.26	182.67	0.00	211.33	233.00	195.75	150.14	164.76
- STD. DEV.	0.00	0.00	15.01	24.33	24.81	12.70	0.00	10.12	0.00	16.01	26.71	29.94

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	1	93	0	6	0	0
% AT STAGE	0.00	0.00	0.00	1.00	93.00	0.00	6.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	0	59	1	60
%	0.00	98.33	1.67	100.00
% SAMPLE WEIGHT	0.00	30.98	0.03	31.01

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	40	60	0	100
%	40.00	60.00	0.00	100.00
MEAN WEIGHT	149.13	175.18	0.00	164.76
% SAMP. WT.	36.20	63.80	0.00	100.00

TABLE 12 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY SECTION

SECTION: 273 - WINTER HARBOUR
SAMPLE NUMBERS: 86, 82
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 16/87 - MAR 17/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	48	69	30	42	0	0	0	0	0	11	200
% AT AGE	0.00	25.40	36.51	15.87	22.22	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	170.63	194.46	210.83	214.55	0.00	0.00	0.00	0.00	0.00	197.64	195.59
- STD. DEV.	0.00	11.06	9.39	8.95	9.66	0.00	0.00	0.00	0.00	0.00	13.90	19.01
WEIGHT - MEAN(gm)	0.00	67.06	105.74	146.03	159.24	0.00	0.00	0.00	0.00	0.00	120.91	114.57
- STD. DEV.	0.00	16.15	19.62	30.18	27.69	0.00	0.00	0.00	0.00	0.00	33.16	41.02

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	1	5	191	1	2	0	0
% AT STAGE	0.00	0.00	0.50	2.50	95.50	0.50	1.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	5	88	0	93
%	5.38	94.62	0.00	100.00
% SAMPLE WEIGHT	0.82	26.85	0.00	27.66

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	107	93	0	200
%	53.50	46.50	0.00	100.00
MEAN WEIGHT	100.73	130.49	0.00	114.57
% SAMP. WT.	47.04	52.96	0.00	100.00

TABLE 13 PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 2W - WEST COAST Q.C.I.
SAMPLE NUMBERS: 360,356,361,292,345
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 13/87 - MAR 27/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	152	273	2	5	5	6	32	4	14	7	500
% AT AGE	0.00	30.83	55.38	0.41	1.01	1.01	1.22	6.49	0.81	2.84	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.27	191.44	207.50	223.40	233.20	233.83	244.69	239.00	246.86	189.57	190.11
- STD. DEV.	0.00	7.87	9.87	3.54	7.37	10.83	8.16	9.18	5.23	9.63	15.08	25.06
WEIGHT - MEAN(gm)	0.00	62.82	102.82	131.50	170.20	201.80	187.33	222.69	195.75	228.79	97.57	105.32
- STD. DEV.	0.00	9.90	17.63	6.36	25.79	27.92	21.53	25.68	21.19	38.81	24.34	49.55

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	164	331	3	2	0	0
% AT STAGE	0.00	0.00	0.00	32.80	66.20	0.60	0.40	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	55	203	0	258
%	21.32	78.68	0.00	100.00
% SAMPLE WEIGHT	3.17	22.79	0.00	25.96

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	242	258	0	500
%	48.40	51.60	0.00	100.00
MEAN WEIGHT	96.67	113.44	0.00	105.32
% SAMP. WT.	44.42	55.58	0.00	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 2E - EAST COAST Q.C.I.
SAMPLE NUMBERS: 166,167,160,159,177,165,157,344,350,367, 155,154,162,171,354,343,172,163,164,156, 314,158,306,359,168,161
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 8/87 - APR 1/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	45	263	147	569	872	87	110	134	144	160	2531
% AT AGE	0.00	1.90	11.09	6.20	24.00	36.78	3.67	4.64	5.65	6.07	0.00	100.00
LENGTH - MEAN(mm)	0.00	169.56	194.00	207.20	215.30	220.31	224.05	228.24	231.57	233.05	213.18	216.13
- STD. DEV.	0.00	8.29	8.40	6.98	7.73	8.14	7.66	8.92	9.21	8.03	18.56	14.87
WEIGHT - MEAN(gm)	0.00	66.62	106.21	132.30	151.69	168.35	174.85	180.44	189.35	201.28	151.73	156.93
- STD. DEV.	0.00	10.86	16.03	16.36	20.51	23.40	23.94	28.15	29.95	25.81	41.21	35.71

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	2	0	415	2056	48	10	0	0
% AT STAGE	0.00	0.08	0.00	16.40	81.23	1.90	0.40	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	127	1093	4	1224
%	10.38	89.30	0.33	100.00
% SAMPLE WEIGHT	2.63	26.00	0.02	28.64

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1306	1224	1	2531
%	51.60	48.36	0.04	100.00
MEAN WEIGHT	146.85	167.76	63.00	156.93
% SAMP. WT.	48.29	51.70	0.02	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 3 - NASS
SAMPLE NUMBERS: 279,229,322,277,286
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 16/87 - MAR 30/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	14	185	64	24	132	37	14	7	7	16	500
% AT AGE	0.00	2.89	38.22	13.22	4.96	27.27	7.64	2.89	1.45	1.45	0.00	100.00
LENGTH - MEAN(mm)	0.00	146.57	181.15	196.95	204.79	210.56	214.22	225.86	226.00	223.43	188.94	196.27
- STD. DEV.	0.00	11.17	11.65	8.00	9.93	8.88	7.54	8.48	14.47	15.79	20.86	19.89
WEIGHT - MEAN(gm)	0.00	38.57	81.71	107.39	124.04	136.32	145.16	172.93	173.29	152.57	97.38	110.26
- STD. DEV.	0.00	10.12	18.18	15.67	17.63	23.38	21.74	26.18	36.05	30.42	31.85	36.68

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	5	5	0	157	272	26	35	0	0
% AT STAGE	1.00	1.00	0.00	31.40	54.40	5.20	7.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	96	134	9	239
%	40.17	56.07	3.77	100.00
% SAMPLE WEIGHT	9.52	14.80	0.05	24.37

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	248	239	13	500
%	49.60	47.80	2.60	100.00
MEAN WEIGHT	109.41	115.03	38.92	110.26
% SAMP. WT.	49.21	49.87	0.92	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 4 - SKEENA
SAMPLE NUMBERS: 287,313,288,280,230,226,223,291,225,237, 298,341,231
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 20/87 - MAR 31/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	15	470	136	84	418	70	40	29	8	30	1300
% AT AGE	0.00	1.18	37.01	10.71	6.61	32.91	5.51	3.15	2.28	0.63	0.00	100.00
LENGTH - MEAN(mm)	0.00	167.40	180.47	196.14	206.85	211.86	217.84	218.88	221.34	221.13	193.80	198.42
- STD. DEV.	0.00	14.64	9.79	9.24	8.28	7.94	9.04	7.64	7.07	3.36	18.64	18.02
WEIGHT - MEAN(gm)	0.00	64.40	81.39	107.21	128.07	141.10	151.83	156.88	165.72	162.25	101.20	115.06
- STD. DEV.	0.00	16.82	14.63	17.37	18.03	21.98	24.21	20.56	21.39	20.74	31.33	35.26

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	2	189	1033	20	56	0	0
% AT STAGE	0.00	0.00	0.15	14.54	79.46	1.54	4.31	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	54	551	11	616
%	8.77	89.45	1.79	100.00
% SAMPLE WEIGHT	1.88	25.04	0.03	26.95

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	682	616	2	1300
%	52.46	47.38	0.15	100.00
MEAN WEIGHT	108.86	122.05	79.50	115.06
% SAMP. WT.	49.63	50.26	0.11	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 5 - GRENVILLE-PRINCIPE
SAMPLE NUMBERS: 309,235,364,302,222,228,329,224,307,299, 232,233,227,319,324,316,285,236,308,234, 282
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 18/87 - APR 3/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	8	823	191	136	569	116	68	72	31	85	2099
% AT AGE	0.00	0.40	40.86	9.48	6.75	28.25	5.76	3.38	3.57	1.54	0.00	100.00
LENGTH - MEAN(mm)	0.00	161.63	182.93	195.02	206.74	211.53	216.25	220.03	224.06	226.03	197.95	198.94
- STD. DEV.	0.00	11.10	8.43	8.46	9.37	8.69	9.28	9.73	10.65	8.84	19.00	17.48
WEIGHT - MEAN(gm)	0.00	56.13	85.18	106.69	129.32	144.77	154.72	159.78	173.54	180.03	116.91	118.02
- STD. DEV.	0.00	15.88	13.40	16.45	22.54	21.86	24.42	26.07	29.67	21.10	38.04	36.77

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	1	246	1805	46	1	0	0
% AT STAGE	0.00	0.00	0.05	11.72	85.99	2.19	0.05	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	58	949	0	1007
%	5.76	94.24	0.00	100.00
% SAMPLE WEIGHT	1.29	26.27	0.00	27.56

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1092	1007	0	2099
%	52.02	47.98	0.00	100.00
MEAN WEIGHT	112.41	124.10	0.00	118.02
% SAMP. WT.	49.55	50.45	0.00	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 6 - BUTEDALE
SAMPLE NUMBERS: 189,195,209,199,215,204,213,193
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 10/87 - MAR 29/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	118	157	85	189	62	36	35	46	36	36	800
% AT AGE	0.00	15.45	20.55	11.13	24.74	8.12	4.71	4.58	6.02	4.71	0.00	100.00
LENGTH - MEAN(mm)	0.00	146.47	186.61	199.93	208.24	213.73	218.69	216.51	224.13	226.17	199.64	196.59
- STD. DEV.	0.00	12.67	7.80	7.80	7.65	10.93	9.65	10.88	10.28	13.49	25.87	26.21
WEIGHT - MEAN(gm)	0.00	38.11	95.03	119.55	136.61	147.76	157.44	154.34	174.83	179.72	120.47	118.10
- STD. DEV.	0.00	15.28	13.67	17.47	17.92	23.51	23.55	29.16	23.24	37.29	46.83	46.38

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	39	56	16	322	359	0	6	2	0
% AT STAGE	4.88	7.00	2.00	40.25	44.88	0.00	0.75	0.25	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	235	162	3	400
%	58.75	40.50	0.75	100.00
% SAMPLE WEIGHT	10.73	12.47	0.00	23.20

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	363	400	37	800
%	45.38	50.00	4.63	100.00
MEAN WEIGHT	117.00	127.28	29.62	118.10
% SAMP. WT.	44.95	53.89	1.16	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 7 - BELLA BELLA
SAMPLE NUMBERS: 198,333,191,289,283,202,317,196,208,210,
217,295,335,206,342,321,218,211,205,216,
221,293,203,330,219,212,197,207,220,201,
190,332,296,339,363
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 2/87 - APR 2/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	313	730	480	1014	160	133	166	135	174	150	3455
% AT AGE	0.00	9.47	22.09	14.52	30.68	4.84	4.02	5.02	4.08	5.26	0.00	100.00
LENGTH - MEAN(mm)	0.00	154.43	185.18	200.08	212.12	218.02	222.77	226.00	229.92	233.55	202.03	202.22
- STD. DEV.	0.00	14.10	11.56	10.68	10.77	13.39	10.26	11.00	10.04	9.20	24.36	24.09
WEIGHT - MEAN(gm)	0.00	48.51	92.19	123.12	151.42	169.66	183.33	189.02	203.20	210.20	132.57	133.70
- STD. DEV.	0.00	18.20	20.86	25.58	29.06	37.91	35.24	35.73	33.00	34.78	52.76	52.65

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	60	100	25	1437	1796	18	8	0	11
% AT STAGE	1.74	2.89	0.72	41.59	51.98	0.52	0.23	0.00	0.32

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	798	931	4	1733
%	46.05	53.72	0.23	100.00
% SAMPLE WEIGHT	10.50	16.26	0.00	26.76

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1594	1733	128	3455
%	46.14	50.16	3.70	100.00
MEAN WEIGHT	128.97	145.17	37.13	133.70
% SAMP. WT.	44.51	54.46	1.03	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 8 - BELLA COOLA
SAMPLE NUMBERS: 192,200,214,194
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 4/87 - APR 3/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	65	130	73	82	8	5	9	4	2	17	395
% AT AGE	0.00	17.20	34.39	19.31	21.69	2.12	1.32	2.38	1.06	0.53	0.00	100.00
LENGTH - MEAN(mm)	0.00	154.31	176.88	192.67	199.06	209.50	208.80	215.89	215.25	217.50	172.12	183.03
- STD. DEV.	0.00	13.32	11.96	8.35	9.74	13.02	8.98	10.68	4.11	6.36	25.43	20.71
WEIGHT - MEAN(gm)	0.00	48.85	76.62	101.41	114.74	134.38	124.60	160.00	146.75	151.00	76.59	89.31
- STD. DEV.	0.00	15.36	16.79	18.11	20.75	25.35	24.73	30.15	11.87	22.63	34.49	32.89

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	14	4	169	125	0	81	2	0
% AT STAGE	0.00	3.54	1.01	42.78	31.65	0.00	20.51	0.51	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	110	19	32	161
%	68.32	11.80	19.88	100.00
% SAMPLE WEIGHT	16.36	3.61	0.42	20.39

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	222	161	12	395
%	56.20	40.76	3.04	100.00
MEAN WEIGHT	85.36	99.07	31.42	89.31
% SAMP. WT.	53.72	45.21	1.07	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 13 - QUATHIASKI
SAMPLE NUMBERS: 72, 75,315,320, 74, 71, 73
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 10/87 - MAR 18/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	31	293	180	79	19	7	0	1	0	90	700
% AT AGE	0.00	5.08	48.03	29.51	12.95	3.11	1.15	0.00	0.16	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	153.35	182.05	189.58	199.24	203.05	211.29	0.00	216.00	0.00	192.34	186.89
- STD. DEV.	0.00	15.14	10.60	10.03	12.44	9.51	5.28	0.00	0.00	0.00	16.28	15.27
WEIGHT - MEAN(gm)	0.00	46.94	78.56	93.02	107.63	117.16	131.00	0.00	131.00	0.00	99.51	88.50
- STD. DEV.	0.00	17.41	15.68	17.83	26.02	25.49	15.64	0.00	0.00	0.00	31.03	25.25

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	6	8	1	84	535	31	35	0	0
% AT STAGE	0.86	1.14	0.14	12.00	76.43	4.43	5.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	31	309	16	356
%	8.71	86.80	4.49	100.00
% SAMPLE WEIGHT	1.23	20.46	0.07	21.77

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	334	356	10	700
%	47.71	50.86	1.43	100.00
MEAN WEIGHT	86.42	91.94	35.40	88.50
% SAMP. WT.	46.59	52.83	0.57	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 14 - COMOX
SAMPLE NUMBERS: 338,362, 47,318, 58, 30,355, 62, 11, 59, 63, 53,357,325,334, 32, 64, 49,348,327, 353, 42, 50, 78, 34, 19, 7
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 23/87 - MAR 19/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	281	733	986	358	94	27	10	3	1	207	2700
% AT AGE	0.00	11.27	29.40	39.55	14.36	3.77	1.08	0.40	0.12	0.04	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.21	189.64	200.37	207.63	215.30	220.04	231.70	234.00	223.00	192.84	195.06
- STD. DEV.	0.00	16.65	9.98	11.08	11.43	12.77	10.34	8.27	6.00	0.00	15.72	17.42
WEIGHT - MEAN(gm)	0.00	55.99	88.28	109.08	125.88	144.20	150.56	178.10	186.00	160.00	94.92	101.05
- STD. DEV.	0.00	17.51	17.12	22.77	25.38	30.47	29.28	29.90	13.11	0.00	29.53	31.31

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	38	38	13	1142	810	31	613	15	0
% AT STAGE	1.41	1.41	0.48	42.30	30.00	1.15	22.70	0.56	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	638	430	273	1341
%	47.58	32.07	20.36	100.00
% SAMPLE WEIGHT	10.40	8.83	0.30	19.54

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1297	1341	62	2700
%	48.04	49.67	2.30	100.00
MEAN WEIGHT	97.90	107.22	33.42	101.05
% SAMP. WT.	46.54	52.70	0.76	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 15 - WESTVIEW
SAMPLE NUMBERS: 9, 1, 77, 15, 76, 4,366,351,331,346, 3, 31,352, 48, 2, 65, 39,340, 12, 66, 52, 20
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 24/87 - MAR 18/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	1	62	625	774	425	108	32	9	4	3	155	2198
% AT AGE	0.05	3.03	30.59	37.89	20.80	5.29	1.57	0.44	0.20	0.15	0.00	100.00
LENGTH - MEAN(mm)	108.00	154.66	186.07	193.85	202.20	207.44	213.00	217.56	212.75	223.00	198.66	193.56
- STD. DEV.	0.00	13.38	10.10	9.48	9.56	8.99	8.75	8.66	8.66	16.09	17.08	14.37
WEIGHT - MEAN(gm)	14.00	48.21	85.00	100.11	117.86	130.59	146.03	148.44	144.25	166.33	105.55	100.66
- STD. DEV.	0.00	12.04	17.02	18.56	22.45	22.33	24.97	21.90	15.59	27.79	23.89	26.14

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	4	3	18	1274	675	17	206	0	1
% AT STAGE	0.18	0.14	0.82	57.96	30.71	0.77	9.37	0.00	0.05

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	661	394	85	1140
%	57.98	34.56	7.46	100.00
% SAMPLE WEIGHT	12.35	8.67	0.11	21.13

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1050	1140	8	2198
%	47.77	51.87	0.36	100.00
MEAN WEIGHT	96.08	105.28	43.25	100.66
% SAMP. WT.	45.60	54.24	0.16	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 17 - NANAIMO
SAMPLE NUMBERS: 323, 37, 36, 40, 38,326, 46, 68, 60, 41, 61, 33, 51, 43, 8, 79, 18, 35
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 23/87 - MAR 15/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	455	522	466	119	22	8	4	1	1	202	1800
% AT AGE	0.00	28.47	32.67	29.16	7.45	1.38	0.50	0.25	0.06	0.06	0.00	100.00
LENGTH - MEAN(mm)	0.00	171.03	187.45	198.43	211.48	216.77	227.88	233.00	230.00	249.00	185.89	188.25
- STD. DEV.	0.00	10.70	12.93	15.51	12.12	12.90	7.90	10.71	0.00	0.00	17.23	18.64
WEIGHT - MEAN(gm)	0.00	63.49	86.66	104.20	128.74	146.36	163.25	174.75	145.00	216.00	86.59	89.49
- STD. DEV.	0.00	11.97	18.41	24.10	25.35	29.75	28.85	41.83	0.00	0.00	27.10	29.12

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	15	25	904	623	23	206	0	3
% AT STAGE	0.06	0.83	1.39	50.22	34.61	1.28	11.44	0.00	0.17

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	495	295	108	898
%	55.12	32.85	12.03	100.00
% SAMPLE WEIGHT	10.36	8.29	0.25	18.90

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	897	898	4	1799
%	49.86	49.92	0.22	100.00
MEAN WEIGHT	86.14	93.10	43.50	89.52
% SAMP. WT.	47.98	51.91	0.11	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 18 - COWICHAN
SAMPLE NUMBERS: 16, 57
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 27/87 - MAR 1/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	22	65	79	16	4	4	1	0	0	9	200
% AT AGE	0.00	11.52	34.03	41.36	8.38	2.09	2.09	0.52	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	175.14	192.58	205.47	212.38	221.50	222.25	235.00	0.00	0.00	193.56	198.76
- STD. DEV.	0.00	8.08	9.43	10.11	6.89	1.73	7.50	0.00	0.00	0.00	7.86	14.79
WEIGHT - MEAN(gm)	0.00	68.55	95.62	121.63	136.19	160.00	168.25	194.00	0.00	0.00	97.22	109.46
- STD. DEV.	0.00	10.61	19.02	22.15	17.29	8.68	19.64	0.00	0.00	0.00	16.44	29.80

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	2	193	4	0	1	0	0
% AT STAGE	0.00	0.00	1.00	96.50	2.00	0.00	0.50	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	92	2	0	94
%	97.87	2.13	0.00	100.00
% SAMPLE WEIGHT	19.63	0.34	0.00	19.97

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	106	94	0	200
%	53.00	47.00	0.00	100.00
MEAN WEIGHT	99.49	120.71	0.00	109.46
% SAMP. WT.	48.17	51.83	0.00	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 23 - BARKLEY SOUND
SAMPLE NUMBERS: 328, 5,117, 6,112,349, 24, 17, 25, 26, 10, 56, 29, 23, 14,347, 83, 13, 67, 55, 119, 44, 54, 69, 80,121, 88
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 23/87 - MAR 19/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	421	403	917	465	176	67	36	24	11	180	2700
% AT AGE	0.00	16.71	15.99	36.39	18.45	6.98	2.66	1.43	0.95	0.44	0.00	100.00
LENGTH - MEAN(mm)	0.00	172.19	194.15	209.48	219.80	227.13	233.15	237.08	239.96	239.91	199.55	204.99
- STD. DEV.	0.00	7.95	8.52	9.07	8.34	8.84	9.02	6.78	7.70	9.20	20.78	20.27
WEIGHT - MEAN(gm)	0.00	70.13	103.13	135.56	160.37	178.38	198.76	201.64	204.96	201.18	118.24	129.76
- STD. DEV.	0.00	10.63	16.46	21.99	21.77	26.02	25.46	20.62	23.79	30.75	44.41	41.98

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	2	1	2	1422	1261	9	3	0	0
% AT STAGE	0.07	0.04	0.07	52.67	46.70	0.33	0.11	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	624	700	0	1324
%	47.13	52.87	0.00	100.00
% SAMPLE WEIGHT	12.35	15.19	0.00	27.54

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	1373	1324	3	2700
%	50.85	49.04	0.11	100.00
MEAN WEIGHT	122.65	137.22	94.00	129.76
% SAMP. WT.	48.06	51.86	0.08	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 24 - CLAYOQUOT SOUND
SAMPLE NUMBERS: 27, 28, 21, 22
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 28/87 - MAR 2/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	34	39	101	99	53	24	15	8	6	21	400
% AT AGE	0.00	8.97	10.29	26.65	26.12	13.98	6.33	3.96	2.11	1.58	0.00	100.00
LENGTH - MEAN(mm)	0.00	171.97	198.46	211.11	220.04	229.85	235.79	236.07	236.50	245.33	208.38	214.54
- STD. DEV.	0.00	10.68	8.56	8.84	8.63	6.87	9.86	4.20	8.80	6.95	20.05	19.51
WEIGHT - MEAN(gm)	0.00	68.35	106.77	140.43	163.27	189.04	199.42	201.60	202.00	231.67	137.00	151.37
- STD. DEV.	0.00	13.93	16.46	21.81	23.68	22.76	23.68	18.61	30.95	20.44	47.14	44.42

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	2	360	38	0	0	0	0
% AT STAGE	0.00	0.00	0.50	90.00	9.50	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	173	10	0	183
%	94.54	5.46	0.00	100.00
% SAMPLE WEIGHT	25.74	1.65	0.00	27.40

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	217	183	0	400
%	54.25	45.75	0.00	100.00
MEAN WEIGHT	148.12	155.21	0.00	151.37
% SAMP. WT.	53.09	46.91	0.00	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 25 - NOOTKA SOUND
SAMPLE NUMBERS: 91, 87,145, 89, 90, 81,300,312
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: FEB 24/87 - MAR 8/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	147	156	177	243	17	3	2	3	0	52	800
% AT AGE	0.00	19.65	20.86	23.66	32.49	2.27	0.40	0.27	0.40	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	167.87	193.10	210.26	218.63	224.18	230.67	228.00	233.33	0.00	196.63	201.28
- STD. DEV.	0.00	10.08	10.06	8.60	7.92	13.01	5.13	9.90	1.53	0.00	23.88	21.52
WEIGHT - MEAN(gm)	0.00	65.11	102.42	143.81	172.86	193.65	203.33	181.00	222.67	0.00	120.40	130.25
- STD. DEV.	0.00	12.35	19.95	25.62	25.55	42.76	24.11	38.18	10.50	0.00	52.38	48.35

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	0	249	537	10	1	0	2
% AT STAGE	0.00	0.13	0.00	31.13	67.13	1.25	0.13	0.00	0.25

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	119	295	1	415
%	28.67	71.08	0.24	100.00
% SAMPLE WEIGHT	4.66	23.28	0.00	27.93

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	383	415	2	800
%	47.88	51.88	0.25	100.00
MEAN WEIGHT	125.85	134.56	80.00	130.25
% SAMP. WT.	46.25	53.59	0.15	100.00

TABLE 13 (CONT.) PRE-FISHERY CHARTER SAMPLE SUMMARIES BY AREA

AREA: 27 - QUATSINO SOUND
SAMPLE NUMBERS: 82, 86, 85
SOURCE: PRE-FISHERY CHARTER
GEAR: HERRING SEINE
DATE: MAR 15/87 - MAR 17/87

SPECIMENS AT EACH AGE:

	AGE											
	1	2	3	4	5	6	7	8	9	10+	UNKNOWN	TOTAL
NO. AT AGE	0	48	78	45	100	3	0	3	1	4	18	300
% AT AGE	0.00	17.02	27.66	15.96	35.46	1.06	0.00	1.06	0.35	1.42	0.00	100.00
LENGTH - MEAN(mm)	0.00	170.63	195.56	212.36	217.14	224.00	0.00	234.67	235.00	231.25	204.06	203.08
- STD. DEV.	0.00	11.06	9.67	8.58	8.61	11.53	0.00	2.52	0.00	3.40	13.76	19.54
WEIGHT - MEAN(gm)	0.00	67.06	107.18	150.78	164.47	182.67	0.00	211.33	233.00	195.75	132.28	131.30
- STD. DEV.	0.00	16.15	19.48	28.89	26.31	12.70	0.00	10.12	0.00	16.01	33.37	44.48

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	1	6	284	1	8	0	0
% AT STAGE	0.00	0.00	0.33	2.00	94.67	0.33	2.67	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL
NO.	5	147	1	153
%	3.27	96.08	0.65	100.00
% SAMPLE WEIGHT	0.44	28.76	0.01	29.21

SEX RATIO:

	MALE	FEMALE	IMMATURE	TOTAL
NO.	147	153	0	300
%	49.00	51.00	0.00	100.00
MEAN WEIGHT	113.90	148.02	0.00	131.30
% SAMP. WT.	42.51	57.49	0.00	100.00

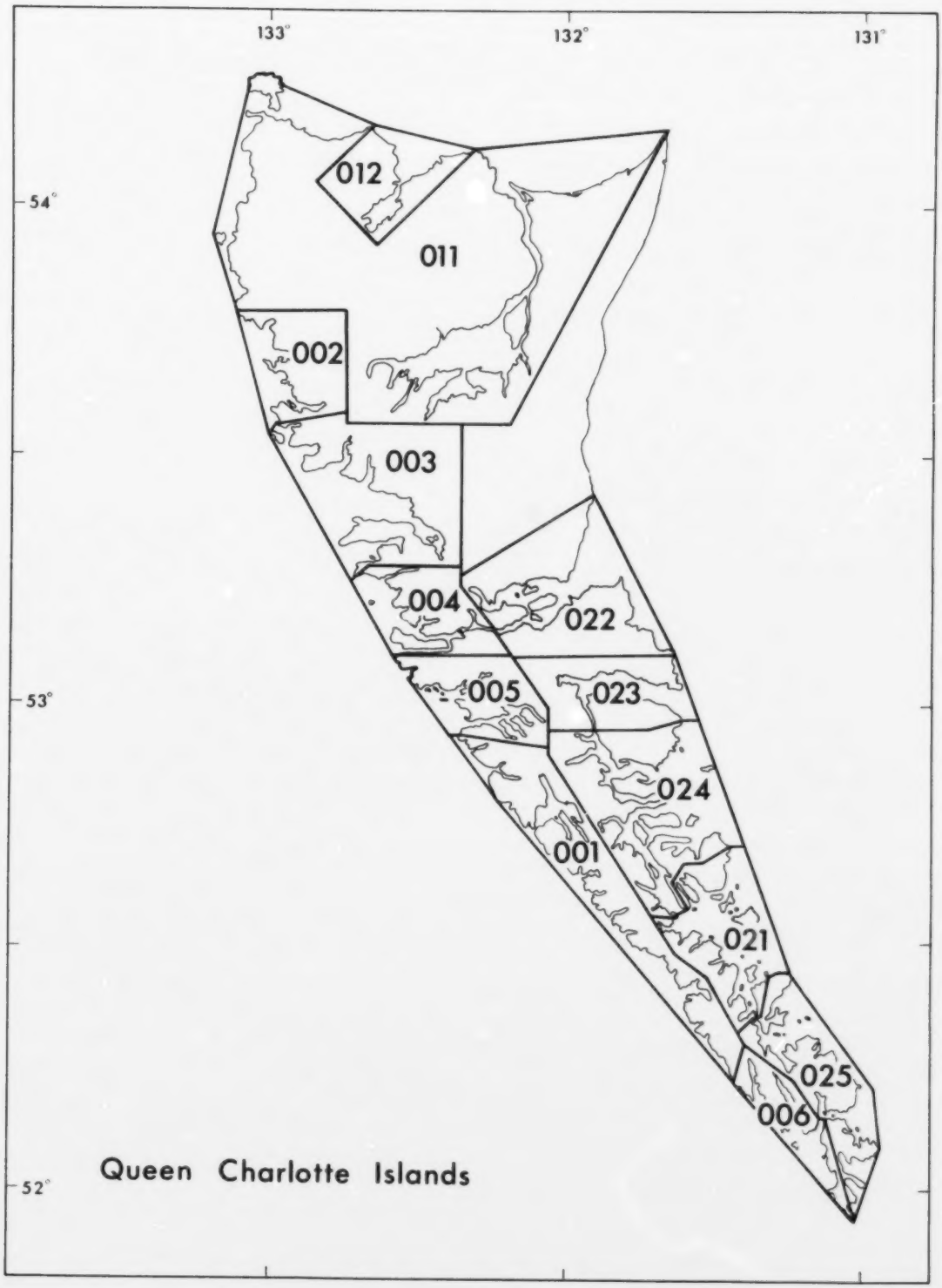

Fig. 1. Herring sections in the Queen Charlotte Islands region.

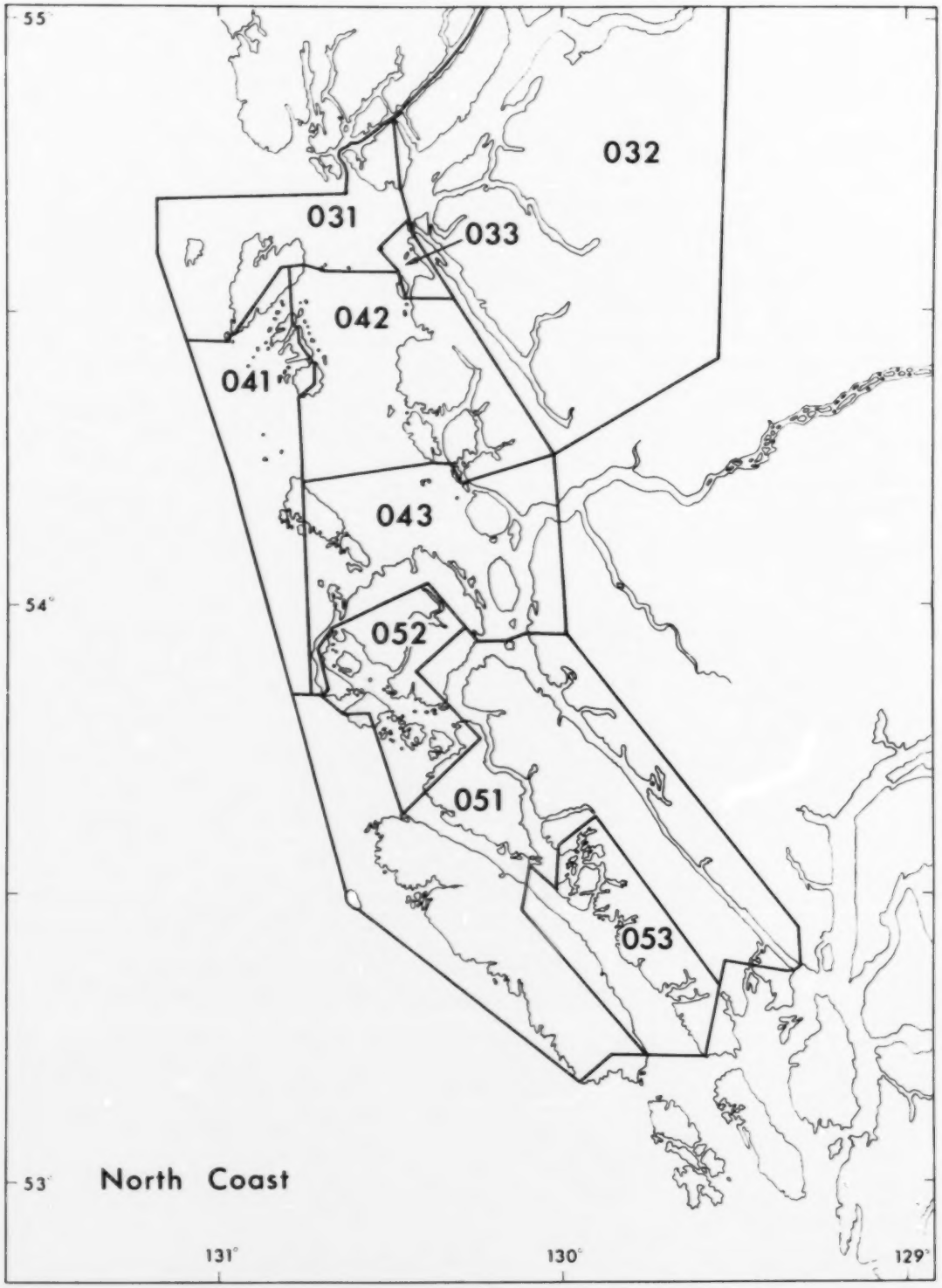

Fig. 2. Herring sections in the North Coast region.

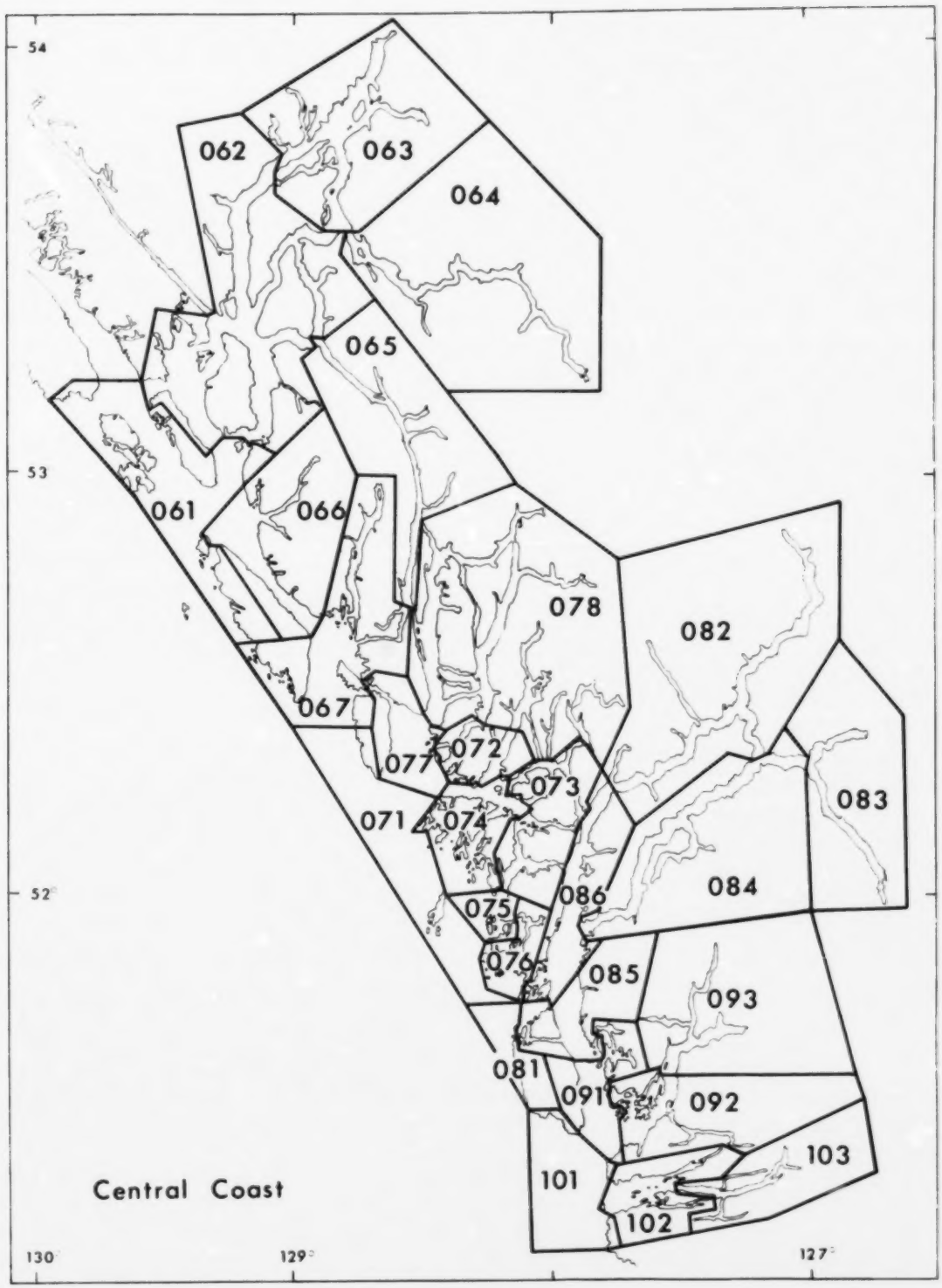

Fig. 3. Herring sections in the Central Coast region.

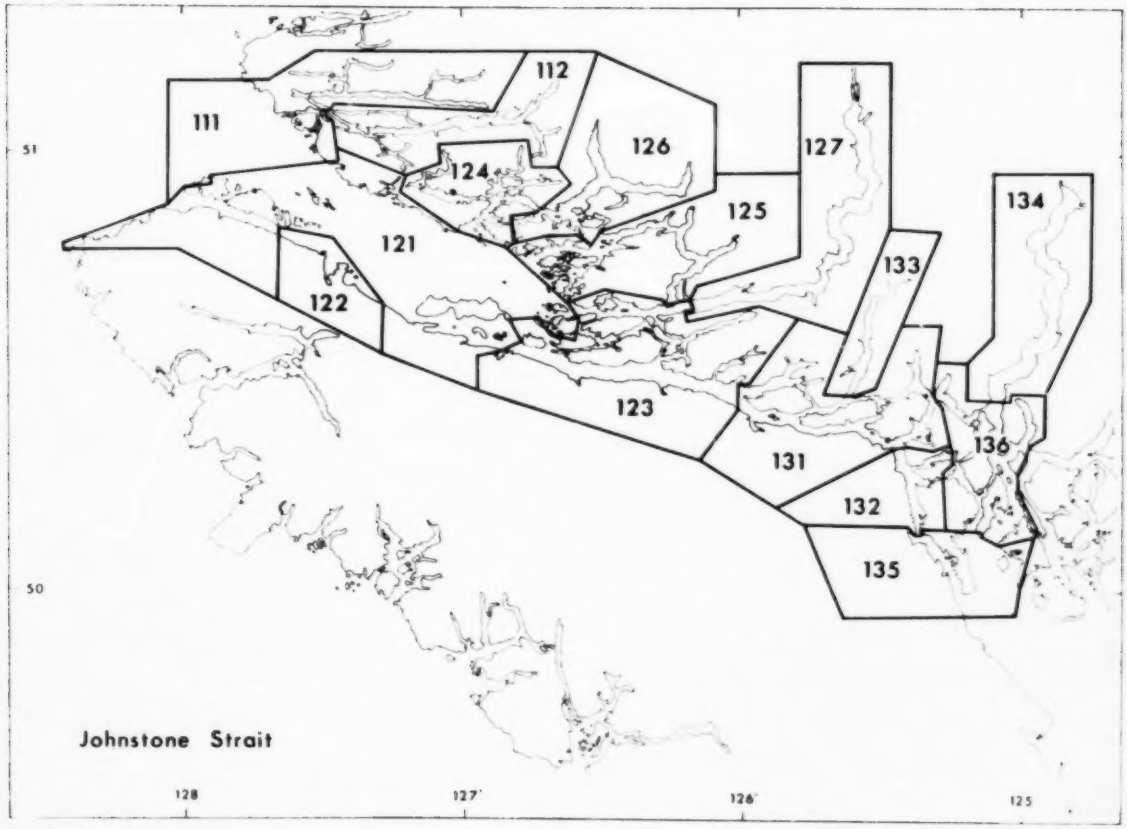

Fig. 4. Herring sections in the Johnstone Strait region.

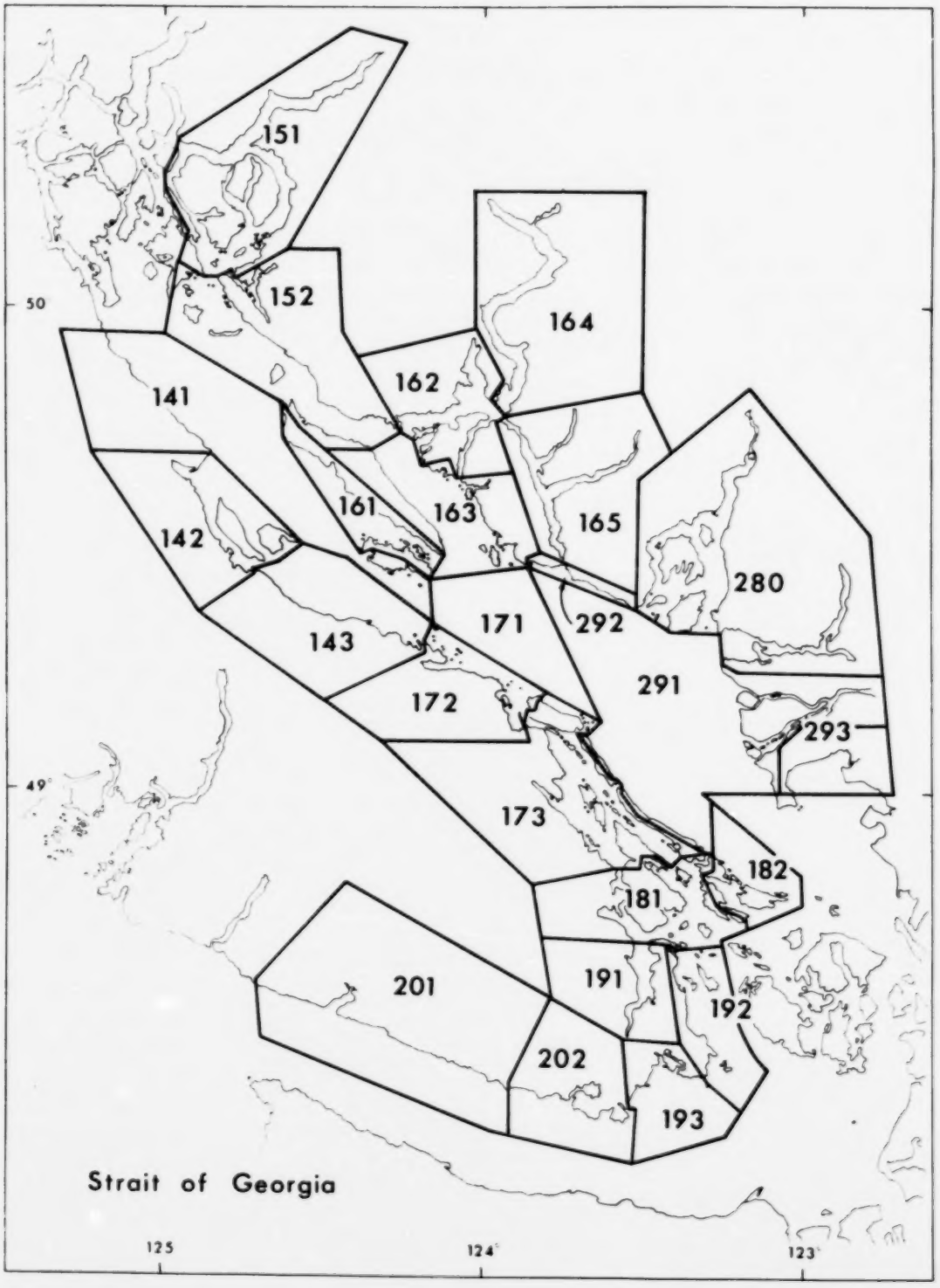

Fig. 5. Herring sections in the Strait of Georgia.

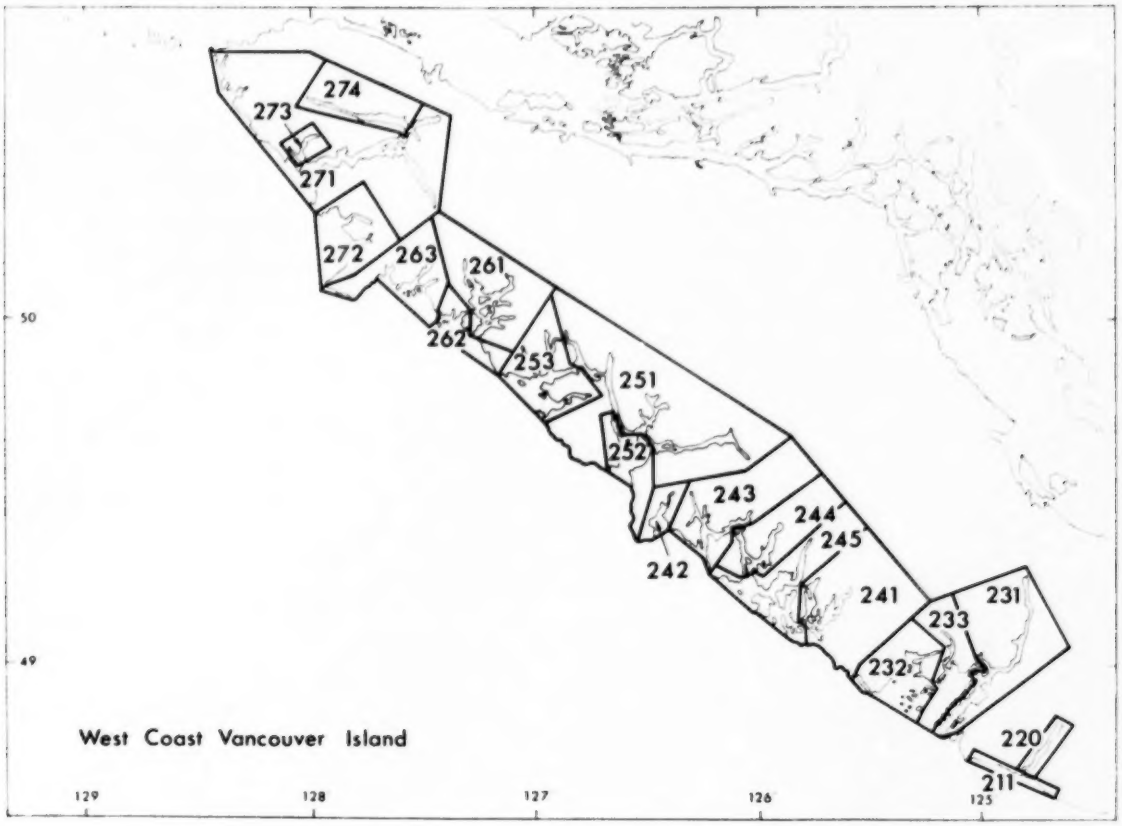

Fig. 6. Herring sections in the West Coast of Vancouver Island region.